

DOCUMENT RESUME

ED 057 981

88

RC 005 879

AUTHOR Burcham, Mildred, Comp.  
TITLE Contemporary Curriculum for Small Schools. Report of a Summer Institute (Willamette University, June 14-18, 1971).  
INSTITUTION Oregon State Board of Education, Salem. Oregon Small Schools Program.  
SPONS AGENCY Division of Plans and Supplementary Centers, BESE.  
PUB DATE 18 Jun 71  
NOTE 144p.  
EDRS PRICE MF-\$0.65 HC-\$6.58  
DESCRIPTORS Behavioral Objectives; Curriculum Design; \*Educational Strategies; Individualized Instruction; \*Information Dissemination; Reading Instruction; Self Concept; \*Small Schools; \*Summer Institutes; Teacher Selection; \*Teaching Methods

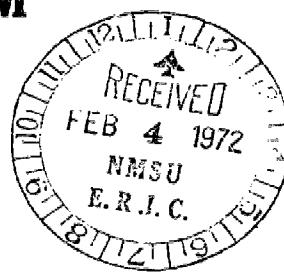
ABSTRACT

The 1971 Oregon Small Schools Program summer institute at Willamette University, June 14-18, was attended by 200 elementary and secondary teachers, librarians, counselors, principals, and superintendents from more than 50 Oregon school districts. The major purpose of the summer institute (funded under Title III of the Elementary and Secondary Education Act) was to disseminate information regarding new techniques, innovative programs, and current educational thinking. The theme for the institute was "Contemporary Curriculum for Small Schools." The program attempted to meet the varied curriculum interests of participants with concurrent, small group sessions for administrators, secondary education, and elementary education. Sessions for elementary teachers and administrators were concerned with individually prescribed instruction, behavioral objectives, effective discipline, questioning strategies, and change in reading instruction. Sessions for secondary educators dealt with educational trends, behavioral objectives, and the legal process and concerns in school affairs. Major presentations dealt with a new design for rural elementary and secondary schools, individually prescribed instruction, due process, improvement of self-concept, student apathy, reading instruction, and teacher selection and evaluation. Condensations of major presentations, reports of concurrent sessions, 7 papers prepared by participants, and the results of an institute evaluation questionnaire are included in this institute report.  
(JH)

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION

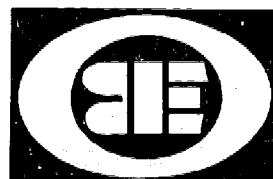
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY.

# CONTEMPORARY CURRICULUM FOR SMALL SCHOOLS



## REPORT OF A SUMMER INSTITUTE

June 14-18, 1971  
Willamette University  
Salem, Oregon



Sponsored by:

OREGON SMALL SCHOOLS PROGRAM  
A Title III, ESEA Project

Oregon Board of Education  
942 Lancaster Drive, NE  
Salem, Oregon 97310

DALE PARNELL  
SUPERINTENDENT OF  
PUBLIC INSTRUCTION

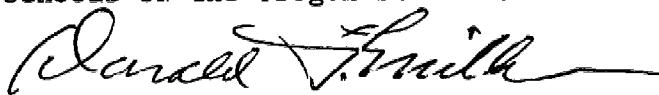
## FOREWORD

One of the responsibilities of the Oregon Small Schools Program is the dissemination of information to its member schools regarding new techniques, innovative programs, and current educational thinking. The summer institute is one part of this dissemination activity, but by its nature it is limited largely to those attending. In an attempt to extend its offerings to administrators and teachers not in attendance and to reinforce the learnings of those present, this report has been prepared. Its purpose then is to serve as an extension and continuation of the 1971 Summer Institute happenings.

Since the Institute had many concurrent sessions, it was impossible for the editor to attend all sessions. Consultants were therefore asked to prepare reports of the sessions for which they were responsible. My sincere appreciation is extended to them for their excellent cooperation in this respect. (There is no report on the evening session which concerned 1971 legislation affecting our schools. This information, Legislative Summary, is being distributed by the Oregon Board of Education office.)

To strengthen the report in some areas and to complete the story of the Institute, several of the graduate papers prepared by participants are included. These were chosen for the previously cited reasons and because, in our judgment, they offered material which would be of interest to our readers. A list of all the papers submitted appears near the end of the report. A perusal of their titles indicates the extensive stimulation of ideas resulting from the Institute presentations and discussions.

It is my sincere hope that this report will prove useful to all educators in the member schools of the Oregon Small School Program.



Donald F. Miller, Coordinator  
Small Schools Program

#### ACKNOWLEDGMENTS

Our very special thanks to these people for doing that extra something that helped make the summer institute successful:

Irv Bissell, Business Equipment Bureau, for generously loaning us the 3 M equipment used in the Media Center

Marv Covey, Marion County IED, for providing 100 copies of their booklet "The Classroom Teacher and Educational Accountability"

Wright Cowger, Willamette University, for setting up and maintaining the Media Center

Jon Croghan, Baker County IED, and his wife, Toni, who had the audiovisual equipment in the right place at the right time in addition to serving as technicians at the video tape camera

Chuck Haggerty and the Oregon Migrant Education Service Center for providing printed materials

Art Hearn, University of Oregon, for his help in planning and grading the papers submitted for credit, as well as his longtime work on the OSSP Steering Committee

Dale Parnell, Superintendent of Public Instruction, for welcoming our participants even though it made him late for a State Board meeting and for his constant support of the Oregon Small Schools Program

Dave Lewis, Willamette University Business Manager, and Bob Schlewitz, Manager of Saga Food Service, for fine facilities, excellent arrangements, and personal services

Ron Thaheld and Guy Waldrop, Oregon Board of Education, for their excellent explanation of legislative changes affecting our schools

Salem Center #3, Division of Continuing Education, for making it possible to offer 3 hours credit from the University of Oregon

Mildred Burcham, for compiling this report of the workshop

### Attendance Honors

The following people have attended every OSSP summer institute, beginning in 1966:

John Campbell, Superintendent, Payette, Idaho, Public Schools

George Fenton, Principal, Pine Eagle High School, Halfway

Bernice Payne, Business Teacher, Dayton Junior-Senior High School

Jim Putman, Asst. Supt. and Vocational Ed., Colton High School

Lyle Rilling, Principal, Jefferson High School

Robert Savage, Superintendent - Principal, Unity

Lucy Susee, English teacher, Harrisburg Union High School

Video tapes of some of the major sessions of the Institute are available for use in Oregon districts. Why not order one of these for in-service during the 1971-72 school year?

The following presentations are available on one-half inch Sony tape:

Bialostosky, Kemper, Fallen: Questioning Strategies

Ellsworth: Improving the Self Concept

Ellsworth: Dealing with Student Apathy

Hart: Due Process (part 1)

Hart: Due Process (part 2)

Manatt: New Design for Rural Elem. and Sec. Schools

Manatt: Individually Prescribed Instruction

## CONTENTS

FOREWORD . . . . .	iii
ACKNOWLEDGMENTS . . . . .	iv
OREGON SMALL SCHOOLS PROGRAM . . . . .	viii
1971 OSSP SUMMER INSTITUTE . . . . .	xi
WELCOME BY SUPERINTENDENT DALE PARRELL . . . . .	xiii

### PART 1. MAJOR PRESENTATIONS

<u>A New Design for Rural Elementary and Secondary Schools</u> , Dr. Richard Manatt, Iowa State University . . . . .	3
<u>Individually Prescribed Instruction</u> , Dr. Richard Manatt . .	10
<u>Due Process</u> , Harold Hart, Multnomah County . . . . .	12
<u>Improving the Self Concept</u> , Dr. Sterling G. Ellsworth, Psychologist, Eugene . . . . .	25
<u>Dealing With Student Apathy</u> , Dr. Sterling G. Ellsworth . .	34
<u>Reading Instruction: The Changing Scene</u> , Dr. William G. Moore, Oregon College of Education; Charles P. Haggerty, Oregon Migrant Education Service Center; Denise Matsch, Hoover Elementary School, Corvallis. . . . .	38
<u>Teacher Selection and Evaluation</u> , Dr. Dale Bolton, University of Washington . . . . .	43

### PART 2. CONCURRENT PRESENTATIONS

<u>Futures</u> , Leslie G. Wolfe, Educational Coordinates NW . . .	57
<u>Introduction to Behavioral Objectives</u> , Leslie G. Wolfe and Glenn Brostrom, Nellie Muir Elem. Sch., Woodburn. . . . .	58
<u>Media in Curriculum Development</u> , Dr. Wright Cowger, Willamette University . . . . .	59
<u>Management Strategies</u> , Leslie G. Wolfe . . . . .	61
<u>The Manzanita Project: Focus on the Individual Child</u> , Charles Barker and Dale Fallow, Manzanita Elem. Sch. . . .	63
<u>Effective Discipline in School</u> , Dr. Robert P. Selby, Woodlawn Elementary School, Portland . . . . .	64
<u>Questioning Strategies</u> , Dick Kemper, Keizer Elementary School; Arlene Fallen, West Salem Elementary School;	
Julius Bialostosky, Multnomah County IED . . . . .	66
<u>Language Arts/Social Studies Mini-Course--The Community as a Classroom</u> , Charles Scharff, Oregon State University. .	72
<u>Vocational/Technical Mini-Course--Learning Package System Basic Format</u> , Dr. Larry Heath, Oregon State Univ. . . .	73
<u>Mathematics/Science Mini-Course--The Laboratory Approach to Mathematics</u> , Dr. Oscar Schaff, University of Oregon;	
Scott McFadden, Eugene Public Schools . . . . .	77
<u>"Cake and Eat It, Too," Jean Stromquist, Jackson High School, Portland . . . . .</u>	79
<u>Mathematics for the Non-College Bound</u> , James Norton, Multnomah County IED . . . . .	80

<u>Man: Nature's Most Dangerous Animal</u> , Irma Greisel and Peter Jensch, Gresham High School. . . . .	81
<u>Mathematics/Science/Business Mini-Course--Use of Computers in High Schools, and How a Small School Can Get Started</u> , James Norton, Multnomah County IED; Judy Edwards, NW Regional Laboratory; William Petersen, McMinnville High School. . . . .	83
<u>Home Economics Mini-Course--Innovations in Home Economics</u> , Mary Jane Grieve, Oregon State University. . . . .	84
<u>Art Mini-Course--Newer Media in Art Education</u> , Dr. Kenneth Yost, Oregon College of Education. . . . .	85
<u>Business Mini-Course--Three-Hour Block Schedule for Office Occupations</u> , Mary Ann Sloan, Toledo High School. . . . .	86
<u>Office Simulation</u> , Wanda Smith, Sunset H.S. Beaverton. .	88
<u>PE Health Mini-Course--Contract Teaching and Learning</u> , Robert Sauter, Lost River High School, Merrill . . . . .	90
<u>Music Mini-Course--Instruments in the Elementary Classroom</u> , Monroe Richards, Oregon City Schools . . . . .	92
<u>Manhattanville Music Curriculum Project Review</u> , Dr. John McManus, University of Oregon. . . . .	95
<u>Appropriate Music Selection and Programming</u> , Dr. McManus. .	97

### PART 3. STUDENT PAPERS and APPENDIX

<u>Behavioral Objectives: Elementary School Social Studies</u> , Mont W. Smith, Monroe Elementary School. . . . .	101
<u>Starting a Media Center in a Small School</u> , Robert W. Murphy, Culver High School . . . . .	104
<u>The Community as a Classroom</u> , Marcia Skinner, Lowell H.S..	107
<u>How I Will Implement the Strategy "The Community as a Classroom</u> ," John Haller, Mohawk High School, Marcola .	109
<u>An Introduction to Basic Data Processing</u> , Bernice Y. Payne, Dayton High School . . . . .	112
<u>Newer Media in Art Education</u> , Loraine DeRosso, Union H.S..	119
<u>Implementation of the GATE</u> , Rev. Arthur P. Dernback, St. Mary's High School, Medford . . . . .	122
 LISTING OF STUDENT PAPERS . . . . .	125
 INSTITUTE PARTICIPANTS . . . . .	130
 INSTITUTE EVALUATION SUMMARY . . . . .	134

## OREGON SMALL SCHOOLS PROGRAM

The Oregon Small Schools Program (OSSP) became operative in 1965 when state and federal funds were made available for a small school improvement program. Prior to this time, the Oregon Association of Secondary School Principals and the Oregon Association of Intermediate and County Superintendents each had program improvement committees working with the Oregon Board of Education and the small schools.

The Oregon Board of Education, in 1964, appointed a Small School Advisory Committee to develop proposals for continual improvement of instruction in small high schools. This Committee initiated an improvement program open to all small public and private high schools. A prerequisite to membership was a school self-evaluation using the Evaluative Criteria to determine the strengths and weaknesses of its program.

A Title III, ESEA, grant was received from the U.S. Office of Education on May 15, 1966; a subsequent three-year grant, effective July 1, 1970, expanded the program by including the elementary schools that feed into the member high schools. Participating schools contribute \$50 a year and budget money for travel and other expenses incurred by their staff in attending program activities. The Oregon Board of Education has continued its support by providing the coordinator's salary, office space, and much of the cost of office operation.

The Oregon Small Schools Program is voluntary and as of June 1971, included 69 secondary schools and 78 elementary schools. High schools with enrollments of 350 or fewer and the elementary schools feeding into them are eligible for membership.

The objectives of the Program are to help its member schools to--

- Increase their receptivity to new and better ideas in education.
- Implement new programs and apply new techniques consistent with the Oregon Board of Education priority objectives and with the special needs of their districts.
- Obtain the resources and information necessary to carry out those innovative programs and to apply those new techniques.

The Oregon Small Schools Program has worked to attain these objectives by--

- Involving administrators, teachers, school board members, and local communities in the assessment of their educational programs and the determination of their educational needs. (Objective #1)
- Informing administrators, teachers, board members, and local communities of important educational programs and techniques which are new to the small schools and relevant to their needs. (Objective #1)
- Providing small school forums at which Oregon Board of Education personnel can present their priorities and suggest ways to implement them in the small schools. (Objective #2)
- Providing small school forums at which experts on rural education and school curriculum can present programs which meet the needs of small schools. (Objective #2)
- Training small school staff members to use new techniques in summer in-service sessions and regional meetings. (Objective #3)
- Providing information on building plans to support innovative programs. (Objective #3)
- Enhancing staff morale which keeps qualified teachers in the small schools. (Objective #3)
- Guiding innovative small school proposals to sources of funding. (Objective #3)
- Answering any questions within its competence and referring questions to other agencies that can answer them. (Objective #3)

The Program has sponsored regional and statewide in-service workshops and summer institutes, administrator and group-leader training conferences, interschool visitations, self-evaluations, consultative services to districts, and has helped local districts develop projects for demonstration purposes. In-service programs during 1970-71 were aimed primarily toward State Board of Education priorities in primary education, adding the fourth "R"--responsibility, and career education. In 1971-72 they will deal with improving individualized instruction and management techniques.

Noteworthy member-school activities have included projects on learning packages, an automated retrieval system, career guidance, a mobile guidance lab, a nongraded language arts program, art-by-phone, an unstructured art class, community involvement in subject offerings, exploratory programs for eighth graders, innovative scheduling, six-year high schools, building for program change, career education, systems courses, computerized math, remedial reading, individual and small group research by elementary pupils, and a grouped reading and math program for grades 3-6.

A progress survey conducted by the Program in the spring of 1971 indicated that its activities are reaching the intended clientele and impressing them positively, that participants in the Program value the things they have learned from the Oregon Small Schools Program, and that they will be open to ideas which the Program brings them in the future.

To obtain an objective measure of its impact on member schools, Educational Coordinates Northwest was engaged by the OSSP to conduct an evaluation of certain changes in member schools during the three years of the Title III grant. Their first evaluation report, issued in May 1971,\* establishes base-line data for determining the extent to which the Program is meeting its objectives. The data cover three major areas: the extent to which member schools have implemented methodological and organizational changes, the "climate for change" which has been established, and the extent to which the schools are moving toward implementation of Oregon Board of Education objectives. Findings indicate an increase in the variety of teaching methods used, improvement in the climate for change, and some implementation of Oregon Board of Education priority objectives.

---

\* Independent Evaluation Report, Oregon Small Schools Program, Educational Coordinates Northwest, 1971. Loan copy available on request from the Oregon Small Schools Program, Oregon Board of Education, 942 Lancaster Drive NE, Salem 97310.

## 1971 OSSP SUMMER INSTITUTE

The 1971 Oregon Small Schools Program summer institute at Willamette University, June 14-18, was attended by two hundred elementary and secondary teachers, librarians, counselors, principals and superintendents from more than fifty Oregon school districts. This was the largest attendance in the six-year history of such institutes since, for the first time, elementary educators attended. Members of the OSSP Steering Committee attended many sessions.

The annual summer institute has been the single most intensive dissemination activity of the OSSP. At this time educational experts of state and national stature present their ideas on the institute theme.

"Contemporary Curriculum for Small Schools" was the theme for the 1971 institute. The program attempted to meet the varied curriculum interests of participants with concurrent, small group sessions for administrators, secondary educators, and elementary educators. Participants were free, however, to attend any session in which they were interested. General sessions dealt with topics of wide concern.

Dr. Dale Parnell, Superintendent of Public Instruction, extended his personal welcome on Monday morning. The keynote speaker was Dr. Richard Manatt, Iowa State University, who spoke on a new design for rural elementary and secondary schools at the first general session and on individually prescribed instruction at a session for elementary educators which followed.

Dr. Dale Bolton, Washington State College, spent two days with administrators in lecture-workshop sessions on teacher selection and evaluation, trends in systems personnel management, and evaluation of principals and schools. Harold Hart, Assistant Chief Deputy Prosecutor, Multnomah County, discussed due process before a large group on Thursday morning. Dr. Sterling Ellsworth, Eugene clinical psychologist, gave two inspirational presentations: "Improving the Self Concept," and "Dealing with Student Apathy." Forty qualified consultants conducted concurrent small group sessions.

Sessions for elementary teachers and administrators were concerned with individually prescribed instruction, the Manzanita project, behavioral objectives, effective discipline, questioning strategies, and changes in reading instruction. Sessions for secondary educators dealt with educational trends, behavioral objectives, and the legal process and concerns in

school affairs. Concurrent mini courses in secondary subject areas were offered on Tuesday, Wednesday and Thursday. In addition to their sessions with Doctor Bolton, administrators heard Leslie Wolfe, Educational Coordinates Northwest, discuss management strategies. Evening sessions included a media workshop and a presentation of 1971 legislation that affects schools.

Films were available on request for informal viewing. Appropriate books were placed in the summer institute office; thirty-six were checked out during the week.

Three hours of graduate credit were offered participants by the Division of Continuing Education. Each enrollee for credit prepared a paper describing how he would implement one of the workshop strategies or topics in his own classroom or school. Dr. Arthur Hearn, University of Oregon, was present for counseling.

Questionnaires completed by the participants indicated a majority felt the presentations offered much valuable information, increased their awareness and receptivity to new and better ideas in education, made them more confident about developing objectives and designing programs in their districts, and gave them resources and information needed to carry out new techniques and programs. Many indicated they would like regional and/or statewide follow-up sessions on due process, reading instruction, individually prescribed instruction, questioning strategies, and the Manzanita Project. They indicated a desire for further contact with Doctors Ellsworth and Bolton. Extensive suggestions were given for improving the institute and OSSP program. In general the institute was rated outstanding. Some individual participant comments were--

"I gained some excellent ideas and concepts which I fully intend to make use of."

"I thoroughly enjoyed talking with other teachers and learning about them, their situation, their ideas. The sessions provided good practical information, but I want you to know that the information provided was less than the information initiated. Many seeds were planted this week. A few have sprouted, and all summer I expect more to sprout."

"I thought this gave us teachers a wonderful opportunity to find out what was being done in some of the other schools in Oregon and information necessary to carry out these programs. I hope the institute is presented again next year."

"I developed some new ideas, but am in the process of a major change in my school--I'm setting up mini courses. I liked the learning package idea."

"Being a first-year teacher, I am very excited about taking some of the ideas presented in this institute and using them in my classroom. Especially liked the guidelines given us."

---

#### WELCOME BY SUPERINTENDENT DALE PARNELL

It is indeed a pleasure to welcome, this morning, educators of small schools from every area of our state. Some of our best education in Oregon is occurring in many of our smaller schools. Your teacher-student ratio provides an excellent opportunity for individualized instruction. Although I know you have your share of community problems and budget difficulties, on the whole you seem to be able to secure a high degree of citizen support for your programs. Perhaps the most important factor in the quality of education in our small schools is the very personal sense of responsibility so often felt by the teachers, administrators, and board members.

As I meet with State Boards, local boards of education, and community college boards, one of the questions that seems to creep into the conversation a great deal is "What are we getting for our money?" In the recent legislative session, I heard a great deal of discussion about productivity in education--again, "What are we getting for our money?" One of the most heated discussions had to do with driver education. For a while it was taken completely from the state budget, but was included finally on a very tentative basis with instructions to my office to show "what we are getting for our money. Just what is driver education doing? Are we getting value received for the investment?" And so I urge you for this week, think with us and begin to develop some answers in this area of productivity in education.

I would urge you, as I urge myself, let us not become defensive about this interest in productivity. I would rather see us take the offensive and try to accomplish some things in this area that I think we can accomplish. I would rather have us in the profession take a look at this whole subject of productivity. I know that you are going to be doing this and discussing it. We don't have a lot of the answers, but it is time

for us to lower our defensive arms a bit and say, "All right, how can we measure?" We can't measure everything in education, but there are some things we can measure. There are some things on which we can put a cost effectiveness indicator. I would urge you this week to begin thinking along these lines.

We will watch very carefully the things that come out of this conference and your thinking because in years past you have come up with some great things. You have done some excellent work--the kind of work that we want to translate into standard practice across the state. I commend you for your strategic role in improving Oregon's educational efforts. I thank you for coming and welcome you here.

---

# PART MAJOR

A New Design for Rural Elementary  
Dr. Richard Manatt . . . . .  
Individually Prescribed Instruction  
Due Process, Harold Hart . . . . .  
Improving the Self Concept, Dr. S . . .  
Dealing With Student Apathy, Dr. . . .  
Reading Instruction: The Changing  
Moore, Charles Haggerty, and De . . .  
Teacher Selection and Evaluation,

**THE  
DR. PRESENTA'**  
and Secondary School  
on, Dr. Richard Manat  
Henry G. Bissell  
Secondary Pinswor  
Science, Dr. William  
Mayson, Dr. Bell

ONS

3  
10  
12  
25  
34  
38  
44

5

A NEW DESIGN FOR RURAL ELEMENTARY AND SECONDARY SCHOOLS  
(Condensation of Keynote Speech)

Dr. Richard Manatt, Iowa State University

A SCHOOL IN THE NEW DESIGN IS A BUSY PLACE. IN A CONVENTIONAL SCHOOL, IT IS QUIET. THE KIDS SIT IN ROWS, KEEP THEIR MOUTHS SHUT, AND KEEP THEIR HAIR SHORT--AND YOU DO, TOO. NEW ENTERPRISE, BUSINESS, HAS COME IN AND TAKEN YOUR JOBS AWAY FROM YOU BY PROMISING RESULTS. A SCHOOL SHOULD BE BUSTLING WITH ACTIVITY. IT SHOULD LOOK LIKE A FACTORY. THE SCHOOL SHOULD GET AWAY FROM THE CONSTANT PRESS OF KIDS.

"The new design" is an umbrella phrase for humanized education at a reasonable price. It is an umbrella phrase for planning, organizing, staffing, and learning strategies to individualize instruction. It is something that started with big schools because they could afford computers. A computer is a big, dumb, adding machine that is very expensive, but it can't do anything mechanically that you don't first solve intelligently. So the new design has to be more than hardware.

Fifty years ago Rip Van Winkle, Jr. fell asleep. He woke up yesterday in a culvert under Interstate Highway 80N. He went out on the roadbed and a monster coming at him at 75 mph frightened him. So he ran into the field, and there another monster pulling a heavy machine frightened him. So he ran into a little village and right into the school house, and there he felt secure because it hadn't changed since he went to sleep!

The sad thing is this is not a joke. If somebody in New York comes up with a better way to treat a duodenal ulcer, every medical practitioner in this country will have it within two and one-half years. But if someone comes up with a better way to teach or learn, it takes an average of 32 1/2 years for most of us to adopt it. And the last ten teachers are still saying, "Prove it's better," instead of saying, "Look, I can prove the status quo is better."

We can no longer afford a 32 1/2-year cultural lag. I agree with many systems analysts that there is no real growth, there is no real development in an organization, or in the individuals within it, if you don't deal with your problems. We cannot constantly kick under the table that which is wrong today.

I see four basic concerns. It is becoming more and more apparent that the traditional method of instruction is no longer effective. The knowledge in this world doubled from 1900 to 1950. It doubled again by 1960. It is now doubling at the

rate of once every two and one-half years. You no longer can lecture your way through a course. You have to teach students to earn a living; you have to stress learning how to learn; you have to work yourself out of a job.

Another reason I am concerned about the traditional method of instruction is due to research findings on how we learn. Let me sketch for you how you have learned everything that you know. One percent of what you know, you have learned through taste; 1 1/2 per cent of what you know, you have learned through touch; 3 1/2 percent of what you know, you have learned through smell. Only 11 percent of what you know has been learned through your hearing. But 83 percent of what you know, has been learned through your eyes. Twenty-five percent of your nervous energy is expended through your eyes.

In the classroom, if you use the ear alone (lecture), the forgetting curve three days later looks like a ski jump. If you use the eye alone, you can do a little better. If you get the eye and ear involved, you can have 65 percent retention over three day's time. But more important, if I have you talk about it in small groups as you use it, you will have almost 90 percent retention. Jokingly we say, "Don't telephone, don't telegraph; tell a woman and have her tell it back to you." That is the way to learn and to learn permanently. All of this involves individualizing, but don't forget the humanizing. The brain is a tape recorder and there is another tape running simultaneously. If you learn something, how you feel as you learn it is also recorded by the tape which means that if you are the kind of teacher who makes Latin students miserable, that makes them hate algebra, they are never going to use either. The kids today aren't motivated by fear. The kids today fear not our whip nor do they lust for our carrot. The thing that turns them on is pleasure; they like to learn, and they like to have learning be fun.

We are right in the middle of two major conflicts in philosophy. One philosophy says, "Kids are no good, you've got to be mean to them, you've got to keep them in the corner." There is another philosophy that says, "Learning is fun and the kids want to learn. If you get out of their way, become a guide by their side instead of a sage on the stage, kids will learn." The reason we are having trouble right now is the national backlash against permissivism. Parents seem to be saying, "Be hard on kids, but don't expect us to discipline them at home." This national backlash against our permissive schools seems to say, "Teach the best, and shoot the rest."

A lot of teachers forget about motivation. If you are working with a group of adolescents, at any given moment, one out

of five is thinking about sex. If you are over thirty, every twenty-five minutes you have a religious thought--you are thinking religion and the kids are thinking sex. If you are the sex education teacher and you are talking about turning on, you have their attention, but if you are the French teacher conjugating verbs, you have a motivation problem. You have to work on it.

I'm concerned because the teachers are no longer satisfied with their roles. We have been using teachers like they were cuckoo clocks. Every fifty-five minutes we let them hop out of their little, corner-type cubicles, watch the kids walk by an' go back in; bells ring. Teachers say, "We are tired of being a 2" x 4" x 6" teacher, teaching between the two covers of a single textbook adoption, the four walls of a 750 square foot classroom, and the six periods of a Carnegie Unit day." Teachers say, "There must be a better way." Taxpayers are saying, "Look, we have got to have more productivity."

The typical teacher's salary in Iowa has gone up 34 percent in the last three years. Parents are saying, "Okay, that is fine. We are glad to see that." But they are also saying, "How about 34 percent fewer cavities in kid's heads?"

Now you know what you and I generally said, "Why, sure, give us more money and we will do a better job." Do you believe that, really believe that? Let me demonstrate to you that more money won't get it.

Let us turn back the clock. It is now 1950. Some of us here are too young to remember this, but some of us are not. We are watching television. There is a knock at the door. The caller says, "My employer has authorized me to give you this check for \$1,000,000. There is just one string attached. You tell me how you will teach differently tomorrow in your school with this \$1,000,000 than you are teaching today."

"Well," you say, "I'll pay myself more money."

"No, no how will you teach differently tomorrow?"

"You say, "Well, I'll buy myself some hardware."

"No, your school already has the generally adopted hardware in education today--an overhead projector invented by two sailors at the Great Lakes Naval Station in 1942. How will you teach differently tomorrow, when you are hung up on the traditional method of instruction--page-by-page assignments in a single textbook, lesson hearing or recitation, and true-false tests?"

I would say to you, "We have to give them 34 percent fewer cavities. How are you going to go about changing your teaching-learning system to teach kids more effectively?"

The kids are saying today, "Give us relevant experiences. An underground newspaper last fall put out a guest editorial which defined relevancy for teachers. It said, "Relevancy is this: for me, for here, for now. Don't talk to me, about the Korean War, the War you fought in to make it safe for me to go to South Vietnam; don't talk to me about times being bad back in the 1930's, I can't get a job in 1971." You and I won't completely buy that kind of definition.

I think relevancy in terms of your job is to teach kids to think clearly. I think relevancy in terms of your job is to be able to take the knowledge of the past, interpret the present, and work for the future using that information. We can't apply their naive, simple-minded test of relevancy to everything we do. But if you want to be relevant, you have to relate to drugs, to sex, to race, to ecology, and to the war. You must have, at least, some mini-courses on things they are going to bleed and die for. And they must be offered in such a way that they find them meaningful. The kids will always define relevancy in terms of themselves, not in terms of the Seven Cardinal Principles or your behavioral objectives.

We have been treating kids as if they were all purpose and one model; put them on a conveyor belt and treat them all alike. I reject this. I believe, you believe, we must believe that each student is a unique individual with different attitudes, learning tastes, learning styles. I believe that every student receiving individualized and small group instruction should become highly motivated. We haven't been getting that done by lecturing. No one ever learned anything by a lecture. I believe that each student can become more self-directed if we give him a chance.

Ability grouping has been researched thoroughly. The only thing we can find to its advantage is that teachers like it better. I know why you teachers like it better--because you are so misused. You teach six periods out of seven and you have the one so-called "free period," and you are exhausted. I know why you want to go to ability grouping--so you get all the dummies, the six-cylinder personality types first period in the morning while you still have your gum, your whip, and your chair, and you can keep them back in the corner. Then the rest of the day the nice kids, the college bound, come in and you can coast. How about it when you teach a kid, and he doesn't learn? Could we say, "Wait teacher, come back and finish the job?"

But you are like a TV announcer with a guiding white light right behind you and you have to go on to the next unit. Is that production? Well, no. What is your goal?

When we asked the history teachers in Iowa what their goals were for next year, they said, "To finish the book."

I would say to you that the typical student should meet lots of kinds of teachers in a day. When you are teaching, you are worth the \$10,000 - \$12,000 you are finally getting, but when you are pulling on overshoes, dusting the chalk rail because no janitor ever saw dust above his ankles, or when you are running a mimeograph machine, you are cheating the taxpayers. Because you are lousy as a clerical helper. A girl for a \$1.50 an hour can do better than you and I can on a typewriter or on the mimeograph machine.

So my plea is for individualized instruction because not everyone learns at the same rate and in the same way. My plea has been to answer the questions that Trump asked us fifteen years ago: What do kids learn best in large groups? What do kids learn best in small groups? What do kids learn best studying by themselves? My plea has been to individualize instruction.

Let me give you a model for individualized learning. Step 1, Diagnose. You must give a pretest before you teach, or you can't diagnose what the kid needs, you are an educational charlatan. Can you imagine a teacher in the elementary school teaching the concentric circles, first the family, then the neighborhood, then the town, and then the state? Without a pretest she will assume Joel surely has been to the firehouse but that he has never been to Mexico, whereas he really has been to Mexico and not to the firehouse.

It is unprofessional, it is unwise, not to pretest for diagnosis. Do you know how to do it? Take your final examination that you already have and split it--even numbered questions become pretests, odd numbered questions become post-tests--and immediately you have the diagnostic tool to see where the kids are and what they know. Step 2, Prescribe. The cow can't talk. A sick pig can't tell you what is wrong. Well, neither can the little kid who can't read really give you an insight into what he needs in order to be able to read. When a doctor prescribes, he has a series of treatments to apply. If you had a total systems approach to learning such as IPI (individually prescribed instruction), you, too, would have a lot of prescriptions to apply. Step 3, Apply Treatment. The doctor does not tell you to go away and never come back--he always says to take two aspirins and call him in the morning. He says to you, "Look, if you start getting a tummy ache, I'm

giving you too much medicine." Step 4. Self-Test. Why should youngsters not have self-tests? You give midterms? You give finals? If I happen to be walking through the halls, listening to the kids, could I hear them say, "What does she want me to learn?" "Oh, I wish I knew what he wanted me to memorize for the final?" Doesn't it strike you as ironic that the learner, the very person in charge of learning, doesn't know what to study? If you give self-tests along the way with immediate reinforcement so that a student knows whether he is right or wrong, he will know what to study. Step 5, Adjust, post-evaluate. Move some of them on. Spiral some of them back.

What is the new design? The new design in the elementary school is called "ungraded schools," "IPI schools," "continuous progress model schools," "unit type schools." At the junior high, it has been "the middle school," "the audio-tutorial builder," "the continuous progress model." At the senior high, it has been "the Trump plan," "quad-S" or "S-four scheduling," "Stanford School Scheduling Service," "collect scheduling," "large group--small group--independent study." Call it what you will. Basically, it is the teaching and learning approach to individualize and humanize.

About a month ago, Bruce Meeks and I put out a little book, "An Educator's Guide to the New Design." (Kendall-Hunt Publishing Company, 131 South Locust Street, Dubuque, Iowa 52001. \$5.95) Each chapter is in the format of a learning package--it has a rationale, behavioral objectives, pretest, self-test, post-test. We have covered the philosophy and background of the new design, behavioral objectives, team teaching, large group instruction, small group instruction, independent study, use of auxiliary personnel, ways to run open labs, ways to write learning packages. (I mention this book as a reference.)

Basically then the new design is up to you. What it is going to be for your school depends on you. You have to ask yourself, "Why change? What changes are necessary? How do you go about change?" For most small schools that I have worked with, it requires team teaching, phased offerings, open labs, continuous progress.

What is the difference between a conventional school and a school with the New Design? It works better in the small schools because of your advantages. Hopefully the objectives of both kinds of schools are the same--hopefully behavioral. The individual in the New Design school works at his own pace instead of the group rate. The performance curriculum is used instead of a course of study. There is a staff approach instead of one teacher doing everything. You don't have to have

team teaching with the New Design, but it is like apple pie and ice cream--alone they are both great, but together they are tremendous. In scheduling, the group size depends upon the purpose instead of assigning 25-30 students per teacher. Finally, there is a difference in organization. In a New Design school nothing is sacred. No room is owned by a teacher, no building is dedicated to a board member, no wall gets to stand forever. The faculty, the furniture, the building is organized according to the needs.

What is the New Design for small schools? It works. It is not an innovation. It has been thoroughly tested. (Don't re-invent the learning wheel.) It requires teamwork, good scheduling, planning, responsible students. First of all the New Design will require you to spend some money on research and development. A typical school district in America, spends more on toilet paper than they do on research and developments. It will require you to go look at other school districts. You must give the taxpayers pure and unvarnished feedback on what you are accomplishing. If you are going to do the teamwork that is required, you must get going for you the phenomena called the demonstration effect.

I have made a plea for individual, teacher-pupil contact. I have made a plea for more efficient use of teacher and student time. I have said to you, "We should have independent study because it increases student responsibilities." I have insisted that we must increase productivity per dollar spent. It is no longer immoral, illegal, or fattening for teachers to admit, "We've got to do a better job." We have produced at Iowa State almost a thousand teachers that we can't place this year. This may not have happened in Oregon yet but it is going to. Do you know what school boards are doing? They are getting rid of the \$13,000 teacher and hiring a \$6,800 beginner. You and I can't demonstrate that we are any more productive than the young beginner. We love kids better, we can understand them better, but that is not good enough.

Teachers ask, "Won't we be in trouble? Won't we lose our jobs, if we change the teaching-learning systems?" We are never going to have flexible schools until we have flexible people. Americans have never been satisfied with an institution that didn't produce because institutions exist to make life better.

---

Dr. Richard Manatt, Iowa State University

RIGHT IN YOUR ROOM, RIGHT IN YOUR MEDIA CENTER, YOU HAVE ALL OF THE METHODS OF MEDIA AND THE MATERIALS, THE SOFTWARE, THAT YOUR SCHOOL OWNS. YOU MUST MARRY THESE TO YOUR LEARNING PACKAGE. TELL THE KID, "GO TO THE SHELF AND PICK OUT FILMSTRIP 220 AND VIEW IT." HE CAN DO IT, AND IT KEEPS HIM BUSY, AND THAT IS A PART OF THE WHOLE PROGRAM.

Dr. Richard Manatt's second presentation was before elementary teachers and administrators. His subject was "Individually Prescribed Instruction, Now, Later, and the Years Between." He quickly reviewed the history of learning packages and stated that although individually prescribed instruction (IPI) materials have been quite expensive they will become cheaper now that commercial enterprises are taking them over. He commented as follows on why go to learning packages, what is a learning package, and how to write and how to use a learning package.

The rationale behind learning activity packages (IPI) or the answer to why go to IPI is--

- Students learn better if told what they will be able to do as a result of their learning. This gives them a rationale for learning what they are being asked to learn.
- Students learn better if given experiences which help them learn what they are able to do. This is like teaching a child how to ride a bicycle. At first you run along side and hold him up, but eventually you have to let go. This concept is evident in such subjects as driver training. There is something to be said for controlled redundancy, but a functional illiteracy should be allowed for everybody in some areas. There is a need at times for the student not having to know everything as well as the teacher. Don't try to make a student another you.
- Students learn better if they are asked to demonstrate that they are able to do it. You have to ask young people to perform. A great teacher is one who cares about the student and who demands a great deal of him. If you don't select what you teach on the basis of acceptable performance there is no relationship of ends to the means. Children must be pretested so you know what they know already. (Teacher liability insurance has gone up recently because teachers across the country are being sued for malpractice. The surest way to demonstrate

malpractice is to teach without pretesting.) Post-testing is also needed.

- Students learn better if they help the teacher organize the learning experience.

What is in a learning activity package? An IPI type of instruction is a plan for learning providing the student with a programmed series of learning activities which lead him through educational experiences relative to his goals and interests. The package should include a clearly defined rationale for the selection of the particular concepts the student is to learn, a carefully selected range of behavioral goals, learning materials, an opportunity for student self-assessment by pretest and self-tests, and teacher evaluation inventories. Each package has pretests, post-tests, and self-tests. The behavioral objectives tell what the student is to do, under what conditions he will do this, and the minimum requirements.

A learning package is student oriented--the responsibility is on the student. If we go to learning packages, teaching will be revolutionized, textbooks and homework will be forgotten.

It takes time to write learning packages, but soon they will be available so teachers will not need to write them. In writing a package, you have to determine the sequential concepts you need to teach, develop the general objectives, research and sequence the content (as you do research do behavioral objectives and include teaching materials), define specific behavioral objectives, develop pretests, self-tests, and post-tests, tryout, and revise the package.

A series of packages allows continuous progress through individually prescribed instruction by (1) pretest, (2) package, (3) post-test, (4) go on to the next package. If the school develops a series of learning packages, it is ready for continuous progress.

You use the packages, phase in to IPI, by using some packages for enrichment or for remedial teaching while still following the usual program. Eventually some interspersed packages will be available for use while individual packages are being written. Finally, you will have enough packages that you will have a dual system--some children will be on the usual program, some on packages.

Guard against total packages. A total package approach is not desirable. The children want large group instruction at

least a third of the time. Remember that small group instruction provides motivation; large group instruction should not be large group testing. Use the packages for unscheduled time, to keep the children busy on independent study time.

THE ONLY THING I CAN GUARANTEE TO YOU BETWEEN NOW AND THE TIME YOU GO TO HEATHER MANOR ON YOUR OREGON RETIREMENT IS CHANGE. THAT IS YOUR STATUS QUO. IF YOU CAN'T CHANGE YOU ARE DEAD, AND THEY ARE GOING TO GET RID OF YOU. BECAUSE THE YOUNG PEOPLE WORK SO CHEAP, THEY ARE GOING TO GET RID OF US OLD PEOPLE UNLESS WE CAN BE MORE PRODUCTIVE. I ASK YOU TO GO TO THE LITERATURE AND FIND RESEARCH TO ESTABLISH THAT THE TEACHER WITH TEN YEARS OF EXPERIENCE IS A BETTER TEACHER THAN ONE WITH ONE YEAR OF EXPERIENCE.

---

DUE PROCESS  
(Condensation of a Speech)

Harold Hart, Assistant Chief Deputy Prosecutor, Multnomah County

IN THE AREA OF DRUG ABUSE OR CRIMINAL AND DELINQUENT BEHAVIOR, YOU HAVE AN OBLIGATION TO INFORM THE PARENTS. I ALSO THINK THAT YOU HAVE AN OBLIGATION WHICH IS GROSSLY OVERLOOKED AND THAT IS TO INFORM THE POLICE. WHAT I SENSE NOW IN EDUCATIONAL INSTITUTIONS IS A GROWING RELUCTANCE TO TRANSMIT INFORMATION TO LAW ENFORCEMENT OFFICERS, AGENCIES, OR OFFICIALS WHERE THE ACTIVITY ACTUALLY GOING ON IN YOUR PARTICULAR HOUSE IS CRIMINAL IN NATURE. I POINT OUT TO YOU THAT YOU ARE JUST AS MUCH A CITIZEN OF YOUR COMMUNITY AS I AM, AS IS MY NEIGHBOR, AS IS ANYONE ELSE. IT IS A CITIZEN'S OBLIGATION WHEN HE BECOMES AWARE OF A CRIMINAL ACTIVITY TO REPORT IT TO THE PROPER AGENCY. WHAT I SENSE OR SEE THAT YOU ARE TRYING TO DO IS TO HANDLE THIS ON AN IN-HOUSE BASIS, A ONE-TO-ONE COUNSELING, THAT ISN'T WORKING.

You are now seeing the school being brought into court. It has been left out of the legal system for many years. There is no reason for it to have been except that the educational system has always been more or less held separate and apart in our societal structure. The Highway Commission is constantly in court. All the other agencies, boards, and commissions which deal in governmental activities and governmental affairs are constantly in court. They are not afraid to go to court; it is just part of their working day.

You are now seeing a situation evolve where the schools are coming into the courts in many areas. I personally think this is a healthy thing. I think it is something you need not fear. This fear that we have of getting sued is an unrealistic one and, if and when it does occur, I think it is a healthy situation. I know of no finer place to settle disputes than in the courtroom.

We are in a present state of flux, a present state of evolution, with regard to the law. It started most dramatically with the Gault case. . . . In the state of Oregon, this case could never have come about because the Oregon Juvenile Court Code is one of the most progressive and best juvenile codes in the country.

The U.S. Supreme Court's decision in the Gault case has revolutionized, in many parts of the country, the entire juvenile court system. The whole philosophy, the underlying thesis, for the juvenile court prior to this case was that in dealing with young people under the age of eighteen there was to be a nonadversary, educational, nonpunitive, reformatory, rehabilitative type of situation conducted in an informal atmosphere with a judge really sitting in the same position as a parent. With the Gault decision, we have now structured the juvenile court so that it has become more of an adversary and legal system, more like a court than a social agency.

The Supreme Court held in the Gault decision that a juvenile was entitled to be apprised with specificity of the nature of the charge against him; he had a right to confront and cross examine his accusers; he had a constitutional right to legal counsel and, if he did not have the funds with which to retain counsel, the Juvenile Court had an obligation to appoint legal counsel to represent and protect him; he did not have to testify against himself. Prior to the Gault case, a young person could be called as the first witness and asked whether or not he did what he was accused of doing. If he refused to answer, he could be punished for that; if he admitted it, he could be punished for that. The Supreme Court said no more could this be done. The guilt of the youngster now has to be proved from testimony and evidence that is independent from the mouth of the young person involved if he elects to take the fifth amendment.

In addition, the Court said that there was a constitutional right to appeal and that if a statute juvenile code did not provide such a right it had to be written to so provide. Also there had to be some type of court transcript or accurate reporting system to tell what went on. That same situation has not transposed itself to the schools.

In our day, when we went to school, the kindly old principal was our father figure, our surrogate parent who stood in the same relationship to us as our parent would. He would discipline us in the office, he would whack us. And if it got home, then we would get whacked again when our parents found out about it. We now see a situation where legal structures are being moved over to school discipline areas and the in loco parentis doctrine is being whittled away. In some areas it is still valid; in other areas it is nonexistent. But the idea of in loco parentis, where the principal stands in the same relationship to the child as his parents, appears to be on the wane. I think this is something of which young people ought to be apprised because I question whether or not it is what they actually want.

Let me give you a specific example. Some months ago I had an opportunity to spend half a day in Juvenile Court. What were the facts of the case? It was a schoolyard beef. Two black boys were playing basketball on their own free time in a grade school courtyard. Two girls happened to walk by. One of the boys stopped playing basketball, turned to one of the girls, and said, "You think you're so hot."

The girl said, "No, I don't."

And with that the boy holding the basketball threw it at the girls and hit her on the head.

The school principal transferred the case to the Juvenile Court. The petition alleged an aggravated assault and battery with intent to do bodily harm because that is the technical nature of the crime. We spent five hours in Juvenile Court. Each of the two boys had court appointed counsel costing the taxpayers \$50 apiece. The parents of each of the two boys were required to leave their jobs and spend five hours sitting through the hearing, as were the parents of the two girls who were involved. (They came as a matter of curiosity and not as a matter of necessity.) The two girls were there also. We tried the whole thing. At the conclusion of the hearing, the boys were found guilty of the charge and, at the age of twelve, they now became the bearers of Juvenile Court records, a delinquency finding of aggravated assault and battery. They got the same stern lecture from the Juvenile Court Judge that they would have received from their grade school principal in the security and confidential atmosphere of his office.

The principal happened to be there, and I asked him, "Why did you refer this thing to the Juvenile Court? All this money, all this time, to take care of a situation that would have traditionally and historically been taken care of and handled by you in the privacy of your own office."

He said, "Look, my school's a tinderbox right now. It's got problems you couldn't believe, particularly in the racial area. I'm just delighted to find that there is an additional forum, an additional resource, to which these things can now be transmitted. I haven't got the time and I haven't got the inclination to hold full scale hearings in the privacy of my office. And from here on in, I'm going to be transferring most of my school problems to the Juvenile Court."

The young people had all the constitutional safeguards that were afforded them under the Gault decision. They had a full scale hearing on the merits of the case. But I question whether or not this is what the young children really want. It may be where we are headed.

The area of locker searches is still one in which in loco parentis is still in vogue, still holds. Locker searches can be constitutionally made in high schools, and in grade schools, without the necessity of a search warrant. You can search them for a library book; you can search them for contraband; you can make routine locker searches. (I want to point out that in all the things that I am talking about there are probably differences of legal opinions.) But the present status of the law is that you can search school lockers with complete impunity if you are searching the locker as a school administrator.

Should you notify the student that his locker is going to be searched or the students that their lockers are going to be searched? As a practical matter, probably yes. As a legal matter, I don't think it is a legal requirement.

In situations where you suspect there is contraband or illegal material in the locker itself, should you call the police? You can if you wish. If you do, I would suggest that you bow out of it and let the police conduct the search. If you are going to bring in law enforcement officers, and the search becomes a joint enterprise, it may well be that the law will require a search warrant. In that situation, let the police officer handle the actual search and investigation of the locker. If you are merely going to search it on your own as a school administrator, then there is no need for a warrant. You can search it any time you wish for the purposes that I've mentioned.

What if you are assigned to search the locker as a teacher? This could be a delegated duty, and the teacher can also search the locker. The student would be liable for any contraband.

Is it necessary to notify students in their handbooks that their lockers may be searched? I think that is a good practice. I do not think it is absolutely necessary. Most of the more professional schools are doing this--by bulletin or school handbook.

How closely can you shake the lockers down? All the way down. The lockers are part of the school structure for which the school administrator is particularly responsible. It is his responsibility to see that the building is used for the purposes for which it was designed. Responsibility for an educational institution carries with it the right to inspect not only lockers but other areas of the school premises. I suppose that you could search a handbag found in a locker.

In regard to attendance regulations, probably no other area of the high school disciplinarian's day takes more time than attendances cases--truancies, expulsions from school, absences. We operate under a school attendance law which says it is mandatory and compulsory that young people go to school until they are either eighteen years of age or have sooner graduated from high school. (The compulsory school attendance law was in the process of amendment or change in the 1971 legislature.)

There are at least seven or eight ways that you can handle attendance problems. Some schools handle them on a conference basis. They suspend the student, suspension being the equivalent of a request for a parent-teacher conference, in the hope that the parents will exert their authority and responsibility in seeing that the student gets back into school. There are conferences which are a little more effective. Some of them reverse the inalienable right to a school education to make it a privilege.

You can expel them, you can exempt them from attendance. The statute provides many particular causes for exemption--pregnancy, marriage, etc. I think perhaps there are some students who are just not cut out or designed to be members of the educational community on the high school level. The point is that there is a small fraction of students who have no business in school. Their presence there is disruptive. They are apathetical to the educational process. Their presence is unfair to the other students, and I think you ought to cut them out. You ought to identify them, give them every opportunity to remain within the educational confines, and if they can't shape up, dump them.

You can refer them to the Juvenile Court. The Juvenile Code, ORS 419.476, subsection (1), provides that a child whose parents have failed to provide him with the education required by law

comes within the exclusive provisional jurisdiction of the Juvenile Court. You know as well as I do that juvenile courts, from a practical standpoint, are ineffective in handling school attendance problems.

You can prosecute the parents criminally. This is an area that we have overlooked. It is not only the youngster's obligation to be and remain in school during the period that school is in session during the particular years that I have referred to, but it is also a parent's legal obligation to not only get his children to school but to help maintain them there. In Multnomah County, we intend to selectively prosecute classical cases of irresponsible parents under the compulsory school attendance law.

You see this type of philosophy coming in, too, on a country-wide basis. City councils have passed ordinances saying that if their children are delinquent the parents will be held accountable. This philosophy is nothing more than a restatement or reaffirmation of what has been in the compulsory school attendance law since its inception. It is rarely, if ever, utilized, and I suggest it to you as, perhaps, an alternative towards a partial solution of your school attendance problems.

The vocational village concept is another idea. It is an expensive way to handle a school dropout. I think it is much more economical, efficient, and reasonable to see what you can do about keeping students in school in the first place. In addition you can status quo it. You can do just what you are doing now insofar as your school attendance problems are concerned. This is another option that is available to you.

You can either abolish the compulsory school attendance law or change it. Perhaps the reasons for its existence are no longer valid. Take a good look at the compulsory school attendance law to see whether or not you want to do away with it completely or change it drastically.

What can you do about illness? I think you can reasonably require the student to bring a letter or a note from his attending physician or surgeon setting forth the history, nature, and extent of the ailment or illness, its diagnosis and prognosis.

What is the liability if you are not enforcing the compulsory school attendance law? There is no liability that I know of so far as a school administrator is concerned. I think you have to make a "good faith" and "reasonable effort" within the limits of your ability to do so. I don't know of any school that isn't doing that. I don't know of any personal liability

that attaches to a school administrator for an apathetic response to the compulsory school attendance law. The obligation of attendance is upon the child and the parent.

There is one other alternative that I have been a little reluctant to touch upon, but perhaps I should. The young tell me that if the educational institution itself was more challenging, more stimulating, more exhilarating, and if a few people turned them on a little bit, this natural antipathy or reluctance to attend school might disappear for some of the students who are now truant and attendance problems. My response to them is this. I see among our young a growing tendency to demand that they be entertained. They demand to be constantly exhilarated and titillated. They literally challenge you to turn them on and what turns on one child may turn off the child sitting next to him. Even if they had, from an ideal standpoint, teachers who were of even level of excellence, they would ultimately start picking and choosing among them as to which of those particular educators was the best or the better in the situation. Not only that, they couldn't stand it. They would be so exhausted after one week of being exhilarated and challenged that they would go right out of their little skulls.

As regards hair and dress codes, so long as the hair or dress style doesn't create a particular health, safety, or distracting hazard, with the distraction being directly related to the educational process, you are probably not going to be held up or sustained in court on a dress code that seems to dictate the manner or style in which the student shall dress or wear his hair. I am also of the impression that there are some cause and effect relationships between dress and deportment. The key to the whole thing is the way the students conduct themselves. If they are disruptive, then they ought to be censured or disciplined for their disruption, for their misconduct. That doesn't have too much relevance to the way they look, the way they are dressed, or the way their hair is styled.

If they are working in shop and they have long hair that has a tendency to get hung up in the lathe, I think you can very reasonably set forth hair regulations which say that they either wear a bandana, or a snood, or put a rubber band around it, or cut it to prevent a safety hazard. In the cafeteria, we don't particularly want their hair in the soup. There you can reasonably impose school regulations with regard to hair. You can do the same thing with regard to cleanliness of hair. You can do the same thing with regard to dress. If the dress is so bizarre and so abstract that it creates actual disruption of the educational process, then you can reasonably restrict and regulate. (The court's definition of "educational process" is in the article on academic freedom in the February 1971, Bulletin of the NASSP.)

Coaching is a different ball game. Coaches have a little more authority in this particular area because the courts seem to recognize that there is a discipline that goes with school athletics or any type of athletic endeavor. Sometimes it is structured not only by what it is that is done on the athletic field but by what is done off the athletic field. The coaches have been given a wider hand in determining how their particular athletes can dress and wear their hair. Dee Andros got to it on the employment basis.

We are moving out of this area now. I see hair and dress codes disappearing. An evolution is in progress leading to an abolition of dress codes ultimately, or certainly relaxation in dress codes. Where dress codes are being imposed, they do have some direct reference to the educational process. If the dress code is reasonable insofar as health, safety, and educational processes are concerned, it will be allowed.

Insofar as student injuries are concerned, if you have a school nurse on duty, refer the students to her. She is the one who is charged with the responsibility of treating them. If you elect to treat them on an emergency basis, you will be held to a standard of reasonable care--to what the reasonably prudent person would have done under that emergency situation.

The problem of nonstudent loitering is one of your own making. We are handling it now in the Portland school district on the basis of trespass. The vagrancy law is probably unconstitutional for vagueness. There is an Attorney General's opinion issued June 10, 1970, which indicates that ORS 166.060, subsection (1), which relates to vagrancy by loitering around schools, was thought unconstitutional. He also pointed out that there is another statute, ORS 164.460, subsection (1), which relates to trespass. It provides that any person, other than an officer on lawful business, who trespasses upon any enclosed lands or premises not his own and who, upon verbal, written, or printed notice of the person in lawful occupation of the land, fails or refuses to depart therefrom immediately and remain away until permitted to return shall be punished by a fine of not more than \$50 upon conviction. This affords one way of handling the loitering situation. At athletic contests, this would hold true probably not so much for trespass as disorderly conduct or unmannerly behavior. Special officers should be in attendance at your athletic events.

As regards teacher and administrator liability for classroom supervision, the teacher would probably be responsible for whatever happened in his or her absence from the classroom at a particular time. There is an obligation to supervise. Again the obligation is one which has to be reasonably exercised. If the teacher is called from the room on an emergency and has

to leave the class unattended she would probably be exonerated from liability. If she is out doing something other than teaching and supervising her class, and one of the students is injured or hurt which would not have happened otherwise, there is a strong likelihood of liability. If a student teacher, in the absence of the teacher, is negligent in the way she administers the class and if the teacher left a known or presumptively known, incompetent person to take over the class, she may well be held liable. If you act reasonably in letting a teacher-aide handle a class, there is no liability. You will be held accountable for exercise of reasonable care.

The number of teachers that are actually sued are infinitesimal, and yet every teacher that I talk with has a fear of getting sued. There is a gut response that you ought to have, and it is a practical, common sense consideration, in the way that you conduct yourselves during the course of an average working day. As Justice Holmes said, "Even a dog knows the difference between being stumbled over and being kicked." There is a fundamental sense of reasonableness that ought to attend all of you in your daily chores as teachers. I think you ought to come off it a little bit about this terrible fear of getting sued for derelictions of duty. If you are doing your job, cool it, relax, get back into the classroom, and quit worrying about it so much. You are not sued, from a practical standpoint. And even if you are sued, the number of recoveries are small. In cases where there are recoveries, the conduct is so flagrant as to be self-evident, even to you, that there was negligence involved. So don't sweat it quite so much. The courts are not really unfriendly to you, even when you are there.

I'd like to speak to you for just a few minutes on the responsibilities that you have toward parents and other agencies. Your basic duty, I think, with regard to parents, the police, the courts, the students, and yourselves is to inform them. From a lawyer's viewpoint, I think the biggest breakdown in the educational system is here. Many of the problems that confront us today with regard to school authority and discipline could be obviated or eliminated overnight if we merely drafted, and subsequently implemented, and enforced adequate, reasonable guidelines.

In the area of drug abuse or criminal and delinquent behavior, you have an obligation to inform the parents. I also think that you have an obligation which is grossly overlooked and that is to inform the police. What I sense now in educational institutions is a growing reluctance to transmit information to law enforcement officers, agencies, or officials where the activity actually going on in your house is criminal in nature.

I point out to you that you are just as much a citizen of your community as I am, as is my neighbor, as is anyone else. It is a citizen's obligation when he becomes aware of a criminal activity to report it to the proper agency. What I sense or see that you're trying to do is to handle this on an in-house basis, a one-to-one counseling, that isn't working.

I sense in some of the young people that I deal with a growing awareness that there is some kind of a sanctum sanctorum available to them in the school; that they can conduct themselves differently there than they can in other areas of their society; and that there is some type of immunity which attaches to criminal behavior inside the school--that they can't be touched there whereas they might well be prosecuted or assigned to the Juvenile Court if they conducted themselves in the same way outside school.

Therefore, you do have an obligation where it comes to your attention that the behavior of a particular student or group of students is actually criminal, whether it is in the drug area or whether it is just in the assaultive type of behavior that takes place in some of your hallways, or some of the shakedowns, to inform and refer these matters to the police. I don't think you are equipped to handle these in many cases. I also suggest that perhaps we can be of some assistance to you. We don't convict every case that is transmitted to us.

Unwed pregnancies, of course, have to be brought to the attention of the parents. If you cannot do it, then your school counselor ought to try, and if the counselor cannot do it, then perhaps some other person should.

With regard to sex offenses, if and when you find that one of your students is being sexually molested by a parent, your obligation is to inform the law enforcement people. The nature of the offense dictates what it is you ought to do.

Insofar as suspension and expulsion procedures, I'm sure you are all aware that the parents have to be notified. The rules and regulations that I have seen throughout the state appear to be quite adequate in this particular regard.

You do have an obligation to release school records when you are under subpoena. When a Juvenile Court, for instance, is trying a school attendance case and it needs your school records to make the case, I would request, as a matter of protocol or practice, a courtesy subpoena. This will protect you in the release of that information to the court authorities for the ultimate prosecution of that case. The same thing would be true in regards to the release of school records in

contested divorce proceedings where each parent is seeking the custody of a particular child or group of children, and they wish to use the school records as evidence of the other parent's fitness or lack of fitness for custody. Require a subpoena in these situations. You have an obligation to cooperate as well as to inform these people.

Right now there is no privilege which attaches to school records. As a matter of fact, there is an Attorney General's opinion which indicates that school records are in fact public records and they are accessible and accessible specifically to parents.

[Mr. Hart called particular attention to legislation introduced at the 1971 legislative session dealing with student records which may be of great significance in this area.]

As of now there are no privileged records, but you may have some under recent legislation.

You have an obligation to cooperate with parents, with law enforcement officers and agencies insofar as the interrogation of students on your premises is concerned. But law enforcement officers have no legal right to use your school premises to interrogate or investigate the cases that they are particularly interested in. If you wish to allow them the use of your premises or one of your rooms, that is fine. This is an area in which you can set up your own guidelines.

You ought to contact parents by phone first and let them know there is a police officer at the school who wants to talk to their child. If you cannot get in touch with them, then it may be perfectly proper for you to let the interview take place and either have yourself or one of your adult faculty members sit in on the interview as a parent representative.

My point is this. You are running an educational institution. The purpose of your being there is to run some kind of a school. If you want to run an operation where other people, law enforcement agencies, or public servants can come in and discuss various matters, you can do what you wish in this particular area. But you are not bound to let them use your educational facilities and premises to interview and interrogate students. If they come in with a warrant for the apprehension and arrest of one of your students then you have to honor it. Then they have a right to come in and at that point you ought to have some kind of a guideline saying how children are going to be called out. The same thing is true with regard to juvenile court officers.

You are charged with the custody of the child. You are responsible for seeing that a child is not given to anyone. If

you know that a child is in the custody of another parent, you should not consider his release from school to any person. If they want the child released, they can get a court order or warrant. This is traditional insurance for you.

You ought to understand that I am legalistic in my philosophy and discipline. I have been educated and trained this way. You ought to understand that you are going to get a different point of view from me than you have already received from other speakers at this conference. For instance, you have already had a doctor who extolled and propounded to you not to turn these things over to law enforcement officers and agencies. Understand this of him. He is treatment oriented. I am discipline oriented.

I think that sometimes you either create or add to the existing problems in your high school if you seek to treat a discipline problem on the basis of in-house counseling. I'm merely suggesting that there is another option available to you--again on a selective basis. I don't think that a wholesale referral of every miscreant is appropriate because we don't uniformly prosecute every violator of the law. I suggest that you keep an open mind.

\* \* \* \* \*

Following his presentation on "due process," Mr. Hart reviewed some of the coming of age problems in Oregon. He cited statistics and facts concerning our society in which divorce, illegitimacy, abortion, venereal diseases, use of drugs and alcohol, and juvenile delinquency and crime are increasing at an alarming rate. Then since the theme of the conference was a contemporary curriculum for small schools, he described preventive activities undertaken by his office to offset these trends. He expressed a hope that what is being done in Multnomah County might help the conferees determine what to do with their curriculums.

Since the institution of marriage seemed the one common denominator in the area of prevention, the Multnomah County attorney's office decided to reinforce this institution on an affirmative and positive basis. In cooperation with the schools, courthouse field trips were started. Twenty-five high school students were brought one day a week to the Domestic Relations Court where they watched the proceedings in about ten cases--divorce, contempt (fathers before the court for nonsupport), and paternity. After two hours in court, an additional hour was spent with Mr. Hart who answered questions concerning individual cases, described the background of the individuals involved, and discussed courtroom

procedures and the judicial function. From this post-conference, it became apparent that the field trip was not sufficient. Many questions not related to the cases or to marriage and divorce were asked--questions on problems which confronted the students in the overall growing-up process. A mini-course was therefore developed dealing specifically with such problems.

With the assistance of the Oregon State Bar, this mini-course has been offered for the past two years at Washington High School. It is comprised of ten subjects, each subject treatment taking one full school day (three presentations). Each subject is taught by Mr. Hart with the help of a resource person or specialist in the area under consideration. A fifteen-minute opening overview is given by the specialist followed by a question and answer period which comprises the heart of each subject treatment.

Thirty possible subjects for the mini-course topics were submitted to teen-agers. They indicated their priorities were drug and alcohol use, premarital sex and illegitimacy, marriage and divorce, criminal and delinquent behavior, employment of teen-agers, running away, school authority and discipline, curfew, draft laws, and where a teen-ager can go for help. From the last subject, it was concluded that a return to the old neighborhood concept of child rearing, of surrogate parents, was needed.

A problem-solver's program based on this concept then evolved. This is really a counseling service conducted by interested members of the Oregon State Bar which affords assistance, with whatever problems they have, to all persons in Oregon between the ages of twelve and twenty. The service is practical, non-legal, and free insofar as money is concerned. However, for every hour spent in seeking a solution to a problem, the young person is expected to donate an hour of his time to helping someone else. This project is proving very successful and is being introduced into Oregon high schools through the OASSP.

---

IMPROVING THE SELF CONCEPT  
(Condensation of a Speech)

Dr. Sterling G. Ellsworth, Psychologist

IF YOU WANT TO TALK ABOUT BUILDING SELF CONCEPTS, YOU MUST TALK ABOUT LOVE SUPPLIES. LET US THINK ABOUT OUR OWN PERSONAL LOVE SUPPLIES BECAUSE THESE FILL UP OUR OWN LOVE BUCKET. WE CAN'T GIVE WHAT WE DON'T HAVE. YOU CAN'T FILL UP AN EMPTY LOVE BUCKET IF YOURS IS EMPTY. WHAT DO YOU DO IF YOU FIND YOURS IS EMPTY? YOU GET WITH SOMEONE WHO HAS SOME. AND THEN YOU LEARN HOW TO RECEIVE. THE HARDEST THING IS TO EVEN FIND SOMEONE WITH A LOVE SUPPLY, LET ALONE TO LEARN HOW TO RECEIVE.

This business of self is a very important thing. In a day and time when people are apathetic and bored, and when they have lost any big vision of purpose and meaning, especially in large cities, the self concept message is very wonderful. It is like a fresh stream of water because it says, "There is something beautiful inside man, there is something powerful inside man, there is something that can give purpose and meaning, something that can turn you on. It is better than drugs, sex, money, clothes, or cars, or any other kind of game."

Let us talk about what is self--"Self" and "Not Self." Teachers are using words like "self concept" and "Johnnie's self concept." Sometimes they don't even know what the real self is because it is not what they think. So I have put a line down here (on blackboard) and I have put "Self" on the left side and "Not Self" on the right side.

I have often used the word "internals." Internals of course mean the insides and the deep-down. When you talk self concept, you are talking psychological humanism which is an in-depth method. So patients, young people, and everyone talk about "deep-down," "my inside self," "my inner being," "the real me," and "my feelings." This is a feeling approach. In psychology, we have called feeling "affect" and head trips we have called "cognitive." Adults say "affect" and "cognitive" and kids say "head trip," "gut trip."

This business of internals and this inner being is what we mean when we talk about self. If you go to religion, Christian, Buddha, or some other form, the same thing is taught: soul, spirit, self, inner being. That inner being is the real you, and the body is a vehicle, case, or house that it lives in for seventy years and then goes somewhere else. There are many systems talking the same kind of words. A hippie kid just getting off an acid trip or LSD talks about the same

thing. He says, "There was no beginning or ending of me." Some people under mystic experiences and meditation report the same thing: "No time." "No space." "Is connected with the real me."

Several years ago I read an article in LIFE called, "What Death is Like." There was a journalist who one morning felt that he was coming down with a bad cold. He took a bunch of old penicillin pills which he found in his bathroom cabinet and he almost died. Being a true journalist, he tried to record death. He told about how he could feel his toes dying, his calves, ankles and thighs, his chest, and his fingertips. He even talked about how fantastic it was to feel each tooth die and go out like a light, one by one. He thought it was so wonderful that he was getting all this down. And then, "Suddenly," he said, "all of me was gone. My whole body was dead. The lights were out. Then like the lights on a great stage, this other thing loomed into being, far more beautiful than anything I've ever seen, far more deep, far more positive than anything I've ever felt or come into. It was beautiful. It started to blossom in me, and I knew it was the deep inner being of me that had been covered up all my life. There it was stretched out before me. Then the adrenalin smacked my this and my that and I started coming back to life." He was robbed from this beautiful thing that was self and he came back to physical life.

I have had patients, who have begun to glimpse themselves, go home saying over and over, "I am a me," "I am me." "How wonderful it is to find my being and to be turned on." These are deep things of self that you find in age-old literature--people finding their identity, people finding how precious it is to be a human being. It is better than to be a computer, a rock, a blade of grass, an animal, or a tree. Somehow being me is thrilling, precious, and wonderful. These are deep-down constructs.

Under "Not Self" we have used the word externals because they usually are outside, or they are secondary. Self is number 1. Externals are number 2. The externals we classify as body externals, physical externals such as your size, shape, age, race, appearance. Performance is another external. It is a "do" thing. "Be" is under Self. "Have" is under Not Self. "Have" and "do" are important, but "be" comes first.

If you knew the impact of this simple truth, you would see that most people in our society are doing exactly the opposite. They try to find "be" and "me" by "have" and "do." "I am somebody because I have \$60,000." "I am somebody because I have a PhD." That is going backwards. You can't find "be" and "me"

by "have" or "do," and yet that is what the world lives on. So it is sick. The side effects of going backward are anxiety, nervousness, apathy, loss of purpose and meaning. The prison is full; the mental hospital is full; crime is the highest ever. These are the fruits of going backward, trying to find "be" and "me" from "have" and "do."

When a teacher says, "Let's help Johnnie get a better self concept by putting him in an MR reading program so he will get more successes and will like himself," she doesn't understand. She is as sick as Johnnie. She tries to get Johnnie to like himself by having a good performance. She thinks that success is self. Success is not self. Johnnie will not learn to love himself better; he will learn to love his success better. And that is not the same as his self.

So when you use the word "self concept," put your hand over your heart. You are treading on sacred ground and you are in the deep-down, internal, mystic, inner being. You are not talking about how somebody's body looks. We don't say, "Sally is a beautiful girl." We say, "Sally is a beautiful person." Her body may not fit the society mold, but she is a beautiful person because her inner self shines out. That is the difference.

Our society goes on the externals, and instead of having externals be number 2, we have them be number 1. Self is number 1. Any kind of treatment, love, or regard which has self for its target is called "number 1 treatment," "primary regard," "primary love," "internal regard," and it comes first. Externals are number 2, and number 2 is more important than number 4 or 5. Bodies are important; performances are important. They are number 2, but don't think they are no good. Externals are important, but they are number 2. When you use externals as conditions of worth, then self is gone. These conditions take over the job of self. Self is detoured, self is distrusted, self shrinks.

Every little baby is born with the self inside his body. Self can be compared to a seed. A seed has in it all sorts of potential that will blossom and grow if it gets certain kinds of treatment. A seed has all sorts of potential locked in it by its "givens," its genes. Suppose such a wonderful seed was spit out on the freeway and smashed. It is not going to grow because the treatment is destructive to its identity. Suppose that seed was nourished properly. We call nourishment "love supplies," that is the nourishment of the inside self. They are called "the environment," "the treatment," "the classroom vibration." This number 2 thing is what we are going to talk

about as a nourishment for the self. Why are we going to leave out number 1? Because human beings are all good.

I will test that statement. If I pick somebody out of the audience and say something bad about that person, that person will manufacture a defense every time. Human beings don't like to be shot down--to be treated in a negative way. Why don't they? Because they are positive by nature.

A lot of the things that we say are "bad givens," "bad seed," come really from the treatment, not the seed. The seed is good in human beings, and people have actually a great potential.

We don't scratch even the surface of this self in our present day society. It is within the natural potential and capability of every human being to have a photographic memory, to be able to wake up at any time of the night, to know what other people are thinking before they speak. It is within their potential to do ESP. It is within their potential to predict the future. Things which we now think are magic are locked into the seed. If only the world raised children with the full love supplies that they need. Maybe that is true about most of the seeds that we plant. How do we know that the flowers couldn't be far more beautiful?

The human seed is packed with potential of which we know not. We don't understand the great potential that is packed within ourselves as well as those little kids, and big ones, that sit in front of us every school year. If we did know, we would stand in awe of the human potential. A recent White House Conference on Children concluded that the greatest waste in our country is the waste of human potential. It must have glimpsed the great sleeping giants that all of us are. If we knew, we would be ashamed. If we knew, we would be ashamed of how we have kept our own children and our pupils in that trap of never actualizing even one one-hundredth of their potential. That is why people who are getting closer to their real selves through receiving proper love supplies, mystic experiences, and meditations stand in awe. They have a dignity about them, a nobility, a deep respect. There is a sort of sanctity about being human that you never violate. Nourishment is very important for that seed. I want to talk about love buckets. Everybody has a love bucket. Some people have full love buckets, and some people have buckets only three-fourths, two-thirds, one-half, or one-fourth full. Some people have empty love buckets; they never got any love in their buckets. You can tell because they have a different style. This nourishment we call internal regard, you and I call it love, real love.

I had a good title, "human family love." There is no substitute for a proper human family in those first years, zero to ten, zero to fifteen--those first years in a good loving

family. There is no substitute, and there will never be any substitute for the human family love that comes at that time. You can have all the psychologists, psychotherapists, and teachers in the world, but at best they can only replace or be a near substitute for what could of and should have happened in the first ten or fifteen years with a loving mother who wanted to be home, who wanted to be with the children, who wanted to be female. These come first. If she wants to teach school, it is fine, but that comes second, not first.

No success, however great, can compensate for failure in the home. It is the woman's job first; the woman's specialty is internals. If only American women knew, and women in all the other countries knew, that the essence of femininity is unconditional love. Sex is something you are, not something you do. If our teen-agers knew it, school hallways would be different; the games on playgrounds would be different. If only all society knew it, no one could make a nickel with pornography, no one could make a nickel with X rated movies, no one could make a dime with dirty, yellow-backed novels because society would laugh at such folly. But, in our country, people don't understand sex.

This internal regard starts with the mother who loves herself. She loves her baby, and she knows that to be a female means she has a specialty in this internal regard. This is mother love. No man can do as well as a healthy woman in loving that new baby. No woman can do as well as a healthy man in earning the money, building the house, supplying the head of the family sort of things. The male's specialty is externals, number 2. No woman can do these as well as a healthy man. Lots of women do them better than men now, but the women are sick and so are the men. A real woman knows that these are externals and she doesn't put them up or down.

It is only the sick people that say, "He has a better job than I." "I want to be like him." Or the man that says, "You're so lucky to stay home. I want your job." It is only sick people that do comparisons; it is only sick people who do quantitative up and down games. In the healthy person, no one is better or worse. Human beings are different. Variety is lovable and precious. The quantity games are done by the sick people who use these comparisons as substitutes for love.

So the nourishment comes from this beautiful mother first. The child first knows about his mother. He doesn't even see the father, or the brothers, or the sisters until much later, let alone relate to them psychologically. That is the mother's specialty; that is why she ought to nurse her children not because the milk from the breast is any better than the milk

from the bottle. It is the closeness and the commitment psychologically that does the trick.

Internal love has to be given to the seed. If the mother loves to be a human being, that will come to the child. There is a beautiful saying that I want you to remember: "That which is used develops that which is used; that which is not used shrinks away." If you ever broke your leg, you went around on crutches. You know how much attention you got. There was a patient who said, "Doctor, I'm not going to throw away these crutches. I've never had so much attention in my whole life. When I come in, people come around me, they hold me, they give me their chair; they do all sorts of things and show me a respect that I've never had before. I don't think I will ever give up my crutches. I think I will keep them."

And the Doctor said, "Oh, no. When your leg is strong enough to do its own thing again, throw away the crutches and give the job to your real leg."

"Oh, no. I would rather keep the crutches."

So her shoulder and chest muscles got real big and strong and her feet got smaller and actually shrank away. That which is used develops that which is used.

This illustrates the development of this inside self. This inside self has a potential to be utterly happy, utterly thrill every day to be alive, utterly full of purpose, meaning, beauty, and capability. Yet people don't trust it because they have been brainwashed not to trust it--"Shut up that crying or I will give you something to cry about." That is one of the ways they learn. (Shut up, you inside self.) "Don't you dare say that to your mother, I'll slap you in the face." (Shut up your feelings; keep them locked up in your heart.) "Oh, we never talk about that." (Don't say it.) "Take those notes." "You write that down." "Read it when you get up there or else you'll forget." (Don't trust yourself.) Oh, stupid man. Little do you know that the self has the potential to have a photographic memory. You could remember every single thing that ever happened to you, if only you were raised right. That is locked in there by many myriad ways that we teach children not to trust themselves. "Put on a pretty dress and then he will like you." "Get some good grades and you will be somebody." How many of us have said things like that to our children. Teach them not to trust themselves. Trust your body; if your body is pretty, people will buy you, like you. "Don't eat that. You will be so fat nobody will ever marry you." We teach them: give the jobs of life and love to your body, or to the performance, and then someone will buy your package. That is all they will buy, too, just your package. When your package changes, they will change. They will dump you and get a better

package, and you will be all alone. They don't love your inside self.

So we give the jobs away. The inside self is not trusted. It shrinks and the body, appearance, and success grow. People then start to see themselves not as precious human beings with feelings, respect, and dignity; they start to see themselves as grade getters, money makers, sex performers. Ask people, "Who are you?" They will tell you in terms of externals. "I am a psychologist." "I am a doctor." "I am a school teacher." Very rarely do they say, "I am a precious human being, lovable and capable."

The human self has two major characteristics: lovability and capability. Many of you have heard the story of the school children with the signs around their necks: I am lovable and capable. The children are doing a skit on the stage. Each little child was pretending he was in school for the first time. Each came to school with a sign around his neck which said: I am lovable and capable. The children were instructed to interact with the teacher. Every time the teacher treated them in a way that indicated he was not lovable or capable, the child was supposed to tear off part of his sign. This was like tearing off part of his identity.

The theory was that if you treat people in harmony with their identity, their identity will grow and enlarge. The treatment will match the identity of the seed. If you treat them the opposite of their identity, a false identity will grow. The behaviorist says it is all in the reinforcement; you can brainwash people to be good; you can brainwash people to be bad. There is no identity to match by the treatment. The humanist goes further and says, "Yes, reinforcement and extinguishment are very important, but you are missing the whole boat. There is a seed in there that is precious and it is packed full of awesome qualities. It is a human seed and it is lovable and capable. If your treatment matches that seed, the whole thing will burst and grow and actualize its potential. If the treatment doesn't, then you are just brainwashing and playing with those reinforcements."

These little children had the sign around their necks. They started to interact with the teacher. In a matter of twenty minutes, most of them had their signs torn down to just the bare initials. What things did the teachers do to make them tear off their signs? They treated them as though they were not lovable. They were sarcastic. They did things with their body posture, their voice tone, their facial expression. They did those nonverbal things that imply to students that they are not lovable and capable. Research says that 55 percent of a

message when two people communicate, is carried by facial expression and body posture; 38 percent is carried by voice tone. That is 93 percent in nonverbals. Only 7 percent is carried by the words that are spoken. Little children know by your body posture, voice tone, and facial expression whether the treatment is unlovable and incapable.

This skit affords a great lesson for teachers. Try it someday. You will be amazed. Try it in your family. How long will your husband's sign last? How long would your sign last? How long does your sign last in a teachers' meeting? How is your love bucket? Every time you are treated with these precious qualities of your identity your lovability and capability grow. What it boils down to is love supplies. This is the food that builds the self concept.

Wouldn't it be wonderful if everyone thought about his favorite way of being loved? I have often asked people this and found that adults will usually choose empathy--empathy means listening and understanding. Young people usually choose physical affection as their favorite love supply. They don't call it physical affection; they call it "hugs." These are true love supplies. Empathy is so important. We call it emotional first aid.

Why do adults choose empathy first? Because they have been the whole route. They know when physical affection turns into sex, and it turns into seduction, into taking not giving. A kid twelve, thirteen, or fourteen usually hasn't done that trip yet and, when he has it has been distorted, so he chooses physical affection. Also these things can be ranked in chronological order. A little baby doesn't want listening and understanding; he wants to be held; he wants to be close. There are a lot of young people who choose it because they have missed it, and they should have had it first. They haven't even had listening and understanding. They don't even know what you are talking about.

What are the cheap substitutes for empathy and physical affection? There are cheap substitutes. Please remember that empathy is emotional first aid. True empathy is the rarest thing in the world. You think it is easy to listen and understand; it is not. In the substitute column, you can put things that are like the real one, that are the opposite of the real one, and then you can make your own love list.

[See the booklet distributed at the Conference, The Classroom Teacher and Educational Accountability, p. 48.]

What is like empathy? Agreeing with somebody is like empathy. It sounds good, feels good, but it is not the same; it is not therapeutic. It does help to just agree with somebody. He wants to be understood. There are all sorts of things people do that

are like empathy. The opposite of empathy is arguing, and that is the most common love substitute. The parents think they are filling the love bucket because they are putting in the hours. What are they doing? They are arguing, lecturing, solving the kid's problems for him, explaining why, boxing him around, telling him what to do. Those are so common, and parents spend a lot of time on them and wonder why his love bucket doesn't fill up.

Let us also say that the substitutes have a flavor that is clearly recognizable. The flavor is taking. The love supplies have a flavor and the flavor is giving, sharing. The love supply side has a full love bucket. The person giving the love has a full love bucket. He wants to share. The need he has is to share. Over here, you have an empty love bucket. There isn't very much love in it. This person doesn't want to share because he is fresh out. He wants to take. He wants to get. This is called "deficiency motivation." The whole aim is to fill up the deficiency. That is the flavor: get, take, use, bargain, trade. Teachers, counselors, and parents do this, they give in order to get. This is the greatest poison in the world, giving in order to get. People think that they can use their children and each other as sources of love supplies and so fill their empty buckets.

What is another love supply? Openness, physically; openness verbally; openness with facial expressions, body posture. What is the open person like? He tells the truth. He tells it like it is. He is real. His words are not used for games. His words are used to help, to communicate his feelings. The opposite of openness is being closed up, lying, not telling the truth, exaggerating. Every virtue can become a vice. Every love supply can become a cheap substitute.

We can go on to respect, trust, service, keeping company with your child. You can make a long list of love supplies. After you get through with the list of love supplies, take inventory of your love supplies. Say, "Who in my life did these things for me?" You may discover that 60 percent of your interactions with people were real love supplies and 40 percent were the common substitutes. You are a 60-40 person. You can't give any more than 60-40. Your love bucket is 60 percent full and 40 percent empty. The target of love supplies is the inside self. That which is used develops that which is used. The substitutes don't work. They are garbage for love. Take inventory of your love supplies. Whenever anything goes wrong, look at the cause. The causes nearly always are too many substitutes, not enough real love supplies.

---

DEALING WITH STUDENT APATHY  
(Highlights from A Presentation)

Dr. Sterling G. Ellsworth, Psychologist

"IF YOU DO NOT KNOW HOW TO DEAL WITH STUDENT APATHY, YOU HAVE A WOUND. SOMEBODY HAS HURT YOU BY APATHY, OR YOU ARE APATHETIC. THE THINGS WE HATE IN OTHERS ARE THE THINGS WE HATE IN OURSELVES."

\* \* \* \* \*

"The real self, as you know, is born in every baby. If it grows the person becomes a self-actualizing person. Often the little baby does not get real love so a negative band forms around the real self. When the real self does not get properly loved or related to--the love targets are not self--it hurts. And so there is a band in every person whose self did not grow very much; there is a band of hurt and pain. It is called their "garbage pile." It is a pain layer where there is bitterness, anger, and pain. Most people will not go around like that because it is too painful. They will put a cover around the layer of pain and hurt. They will do this very early in their lives.

In this outer cover are all sorts of games, masks, defenses, and tricks. Actually these are styles, personality styles. Apathy is one of them. The design is to get love substitutes. The defenses are designed to get love substitutes, a little love, revenge, protection so they won't get hurt again. . . . No one makes a defense unless they are vulnerable. Vulnerable means there is a wound. People with big wounds have big shields. The greater the pain, the greater the cover over the pain."

\* \* \* \* \*

"Remember these three bands: the inside self that cannot grow or get out, the negative band that reacts to it, and the outside cover. The negative band is like bark mulch, it stops the inside self from growing. If you gather up some bark mulch, you will find long white runners; the plants have tried to find some air and light--to be. In so doing, they have had to develop a mutation, an artificial self in order to exist. That is what the human self does. It is buried under all this negative treatment that is not love. It cannot be, so it forms a mutation of self. The cover for the defense, style, is the mutation. So when you see a human being who is rude, apathetic, using all the love substitutes instead of real love supplies, you see a mutation human being. Something is not quite right. Human beings who have been crushed, sucked dry of love supplies, have no deep love.

\* \* \* \* \*

"People who do apathy, or any one of the defense systems, styles of personality, or games, are mutation human beings. Their real self is not able to be. It is never an all or none thing. It is a ratio. Sometimes the self finds clear places where it comes out, and the person glows. If you threaten him in one of these emotional blindspots, you will get the mutation because you are in his wound. What determines where the blind-spots, wounds, and clear spots are? His treatment in the past, how he feels about himself."

\* \* \* \* \*

"It is not just a question of how to deal with student apathy because what will work with one will not work with another because of this defense system. . . . when a person holds to his style, his crutch, and his defense tenaciously, there is a dearth of love supplies. When there are a lot of love supplies, these things fade out. This is important to know when you deal with an apathetic person, and for your own self."

\* \* \* \* \*

"The younger the child the more important it is that all the relationships with him, the interactions, be feeling targets. As he grows older, they can change to task targets. Many of us do not have any feeling targets. We were never related to as feeling people; we have always been related to as task people . . . . The interaction target should be the inside self. Every time the feeling target is the inside self, you are in the right reason category. The right reason to like somebody is because you can see his inside self and you love your inside self. The more you turn on your own beautiful self inside, the more you will turn on to others. Love your neighbor as yourself. You cannot love others until you love yourself."

\* \* \* \* \*

"IF YOU ARE TO DEAL WITH STUDENT APATHY, YOU HAVE TO SEE IF APATHETIC SCHOOL CHILDREN MAKE YOU MAD, OR TURN YOU ON, OR MAKE YOU FEEL OVERWHELMED AND HELPLESS. YOU HAVE TO KNOW YOURSELF TO HELP PEOPLE."

\* \* \* \* \*

"Apathy is 'I don't care.' It is a facade. People really do care. Apathy usually is a form of rebellion. It is the nonviolent thing. We call it "passive aggression." You can make people mad, aggress toward them and make them mad, if you will be passive. The best way to be passive is to do nothing; it is very easy. Do nothing and you will just make them ranting,

raving mad. How many of you teachers know students like this? The best thing to do to make you mad is to do nothing. What does it do? It threatens your adequacy, implies that you are not a good teacher or person. Teachers who use performance as a crutch for their worth are very greatly threatened by these apathetic styles. They cannot deal with the apathetic person."

\* \* \* \* \*

"If you have a lot of apathy in your classroom, one great reason may be that you use performance as a love supply, and you are taking love out of your students' buckets. You make them perform so you can feel better. The way to stop you from doing this is to not do your performance. So you won't feel good. Remember, the purposes of a defense is to hurt the person who is stealing your love supplies, or not giving you any."

\* \* \* \* \*

"How can a teacher work with student apathy? The apathy scares her to death because she is using performance as a condition of worth. What can she do? Until she loses her performance crutch, she will not be able to deal with that student. He has her right in the wound. How does a teacher deal with a performance crutch? She has to dig down and find out where she learned to buy love by pleasing people or getting them to follow her program. She has to get some substitute love while she is getting the explanation. What kind of an experience does she need? She needs some love for free. No one would buy love if they could get it free. Why buy love by making the children perform? If you had tons of free love on the basis of your beautiful self, you would not do it. SO THE WAY TO DEAL WITH STUDENT APATHY IS TO LOOK AFTER YOUR OWN SELF--FIND OUT WHAT YOUR CRUTCHES ARE, WHAT YOUR HANG UPS ARE, WHY YOU HAVE SO MANY STUDENTS DOING APATHY AT YOU. IT IS PROBABLY BECAUSE IT WORKS. IT WORKS BECAUSE YOU USE THEIR BEHAVIOR AS A SIGN OF YOUR PERSONAL WORTH. YOU HAVE TO GET RID OF YOUR CRUTCH, YOU HAVE TO STOP THIS, YOU HAVE TO FIND A VALID SOURCE OF LOVE AND LEARN TO RECEIVE IT. THAT WILL TAKE AWAY YOUR PERFORMANCE CRUTCH. THE CHILDREN WILL NOT THREATEN YOU THEN. WHEN THEY SEE IT DOES NOT WORK ANYMORE, THEY WILL STOP."

\* \* \* \* \*

"There are other kinds of apathy. There are kids who do apathy as a transference figure from their mother, who uses a performance crutch, to the teacher. The solution would be for them to find out that you are not like their mother. There is a form of apathy that is pure rebellion; it is anger, intense anger. This pure rebellion comes from the young person who is mad at authority figures. He is mad at authority figures because authority

figures are too bossy, too domineering, too overly protective, too starved for love, and eating out of his love bucket. That rebellion is a distance mechanism. The best way to deal with this, if you do not have this crutch, is empathy. Empathy is emotional first aid."

\* \* \* \* \*

"You can't get everyone of them. There are children who are so starved for love at home and so pained by it, so hurt by it, that they will not let their mask slip one bit; it is too dangerous. They have been hurt so many times they would not trust you if you were perfect. Do not hope to get them all, but do not let them get you down. Your worth has nothing to do with what others do. You are not responsible for their feelings, you are not responsible for their acts. If you are real, they will come along."

\* \* \* \* \*

I want to give you the ABC's which will help you to deal with apathy as well as any other defense. What are the ABC's? The ABC's are three questions that teachers need to ask every time they have an interaction with their students, husbands, wives, or children. The ABC's are questions that get down deep, questions that get beneath the surface. Interaction is only action between you and another person or between you and yourself. Every time you have an interaction you can start asking yourself these ABC's:

- A. How does he, the person you are interacting with, feel about himself? (What is his self concept?)
- B. How did his self concept develop? (How did he learn apathy?)
- C. What is his style? (How does he handle his self concept?)

These ABC's try to find causes. There is a D question which treats the cause: What did I do, what can I do to help the person's self concept? (What kind of love supply will I give?) There is a possible E question: How does he make me feel about myself?

"Suppose you are dealing with apathy and you are the teacher. Ask the ABC's for your own self. Find the cause of your wrong doing and treat the cause. You will come right back to what I told you about love supplies; you must find a valid source of love supplies--a whole bucket--and then you have to learn to receive the love, which is very hard."

\* \* \* \* \*

"Look to your own self concept if you want to deal with student apathy; look at yours and find out what your wounds are, not theirs. They will change automatically. There are some who will not because they are too severely damaged. You should be real anyway. Do not change and be real so you can deal with student apathy, so somebody else will change. That turns the lights out. You cannot program realness, you cannot turn love on and off like a faucet. Let us be real because we want to be real. Let us be real for the rewards of being real."

---

READING INSTRUCTION: THE CHANGING SCENE  
Summary of Presentations By

Dr. William G. Moore, Teaching Research, Oregon

College of Education

Charles P. Haggerty, Oregon Migrant Education

Service Center

Denise Matson, Hoover Elementary School, Corvallis

"LOOKING AT THE PROBLEMS THAT WE HAVE IN SCHOOLS TODAY IN THE AREA OF READING," I PROPOSE, "THAT WE CEASE AND DESIST FROM BLAMING THE CHILD FOR THE PROBLEMS WE HAVE IN EDUCATION; THAT WE NO LONGER DO CASE STUDIES ON CHILDREN; THAT WE NO LONGER GO OUT AND VISIT THE HOMES AND CALL IN THE PARENTS TO EXPLAIN TO THEM THAT THEIR CHILD IS NOT LEARNING IN SCHOOL AND, INSTEAD, BLAME THE SYSTEM IN WHICH THE CHILD IS PUT; AND THAT WE LOOK AT THAT SYSTEM AND SAY, 'LET US NOT CHANGE THE CHILD EXCEPT FROM THE EDUCATIONAL STANDPOINT OF LEARNING, FOR THAT IS CHANGE, BUT WE CHANGE THE SYSTEM TO ACCOMMODATE THE CHILD.'"  
--Dr. Moore.

Problems in the elementary schools' reading programs were presented to show the need for change. References cited included the book Teacher Diagnosis of Educational Difficulties and the Oregon Board of Education's position paper on reading. These indicate the primary problem today in the teaching of reading is the teaching method being used. The Board is requesting a change in the teaching of reading because of the increased number of children referred to remedial and corrective reading programs.

Six steps to a successful reading program were listed by Doctor Moore as--

1. Behaviorally stated objectives
2. Diagnosis of each individual
3. Variety of materials
4. Structured, organized teaching of reading skills
5. Meaningful reinforced procedures
6. Continuous evaluation based on objectives

Only the fifth step cannot be done by the computer. His stress was therefore on meaningful, reinforced procedures.

The problems of teaching reading can be divided into two sets of variables: teacher-learner and instructional. Under teacher-learner variables, the concept of individual differences among first graders was stressed. Some children enter school not wanting to work for the usual social reinforcers that teachers most often provide--smiles, verbal praise, pats-on-the-back. Also some children come to school not wanting to learn. Thus children may enter school who are not teacher oriented in terms of wanting to please her, and also who do not have a desire to learn. Typically, they fail because the school does not provide appropriate reinforcers for them.

These children often learn to obtain reinforcement in undesirable ways--by gaining the teacher's attention through inappropriate behavioral patterns. As the child exhibits more and more inappropriate behaviors, he is often labeled a behavioral problem or an emotionally disturbed child. After two or three years of not learning the required school curricula, he may be labeled as mentally retarded because of this lack of learning. Once a child is labeled, he may no longer be the responsibility of the classroom teacher. She can have him placed in a special class where she will not have to deal with his problems. It is important that educators strive to keep all children within the established educational system and discontinue placing children in various ancillary special systems.

Under instructional variables, the concept of group teaching of reading using basal readers was discussed. The area of skill acquisition in reading was explored, and it was suggested that the basal reader does not appropriately teach skills at a level where a particular child may need them. In a basal series, skills are presented on a grade level basis rather than on the needs of an individual child. This system is successful for approximately 75 percent of the children, but approximately 25 percent do not learn to read using this system. Programs need to be developed so that all children can learn in the educational system.

Some new concepts in the teaching of reading were described. The concept of identifying a child's deficient reading skills, remediating these skills, and evaluating skill acquisition were explored.\* The concept of reading as a tool to gain knowledge was emphasized. Programs that use this type of format were presented: Project Plan, IPI Reading, the Hoover School program, and the Manzanita project. References were cited for other successful reading programs operating today. These are often described in periodicals such as The Reading Teacher.

An actual classroom setting (Grand Prairie School, Linn County) in which many of the ideas previously discussed were applied was described in detail. The classroom was for a group of fifth and sixth graders reading two or three years below grade level. These children were in this classroom setting for 90 minutes of reading instruction. During the first month, the children exhibited a great deal of inappropriate behavior. The teacher was virtually unable to conduct any type of instructional program.

The teacher had acquired a number of reading materials that were used with equipment such as record players, tape recorders, and film projectors. The children were more interested in playing with this equipment than in using it for instructional purposes.

At this point, the district asked Doctor Moore to help organize a reading program that would allow children to be reinforced for reading and that would be individualized for them in terms of material used and skill remediation.

To initiate this program, the 90-minute reading program was divided into two separate blocks: one of 70 minutes and one of 20 minutes. During the 70-minute period the children were to complete reading assignments in three different sets of materials: Sullivan Programmed Readers; SRA Reading Labs; and Reader's Digest Skill Builders.

The child could earn points as he completed his assignments in the three sets of materials. These points could be used to earn free time during the last 20 minutes of the 90-minute period. Each child had to accumulate 30 points to earn free-time activity. These points could be earned in two ways: by engaging in appropriate reading behavior, such as immediately beginning a reading task, and staying with the reading task

---

\* A package "One Example of a Collection of Reading Skills" prepared by Doctor Moore and the Migrant Education Service Center was distributed.

and not bothering others around him. Also, he could earn points by successfully completing the assignments that were given him.

The program was designed to allow the teacher to work individually with four children on a daily basis. During this time, the teacher determined the skills in which the child was deficient, provided remedial material for the child on the basis of his deficient skills, and continually evaluated his progress. To acquire material for this activity, a skill file was organized in which reading workbook pages were filed according to the skills taught. Results of this study were presented both in terms of the behavioral changes that were brought about in the children and the reading growth made by the children.

Doctor Moore then described the kinds of planning necessary to implement a system of this type. Continual data collection is needed to effectively evaluate a child's skill acquisition rate. This requires an initial screening of all children to determine deficient skills, continuous evaluation of children to determine the progress being made in learning new skills, and final evaluation to indicate the number of new skills the child has acquired. He suggested that a variety of reinforcers may have to be used; that many children will not work for such things as teacher's praise, and that tangible reinforcers must be used. A major facet of this type of program, as in any successful reading program, is instruction concerning the application of word attack skills as they relate to comprehension of material read. Emphasis must be placed on the teaching of reading comprehension as a skill.

\* \* \* \* \*

Mrs. Denise Matson, classroom teacher at Hoover School, said they believed in individualizing, they were an open-concept school, and they were child oriented rather than teacher oriented. For three years they have been working on individualized instruction in math, reading, and language arts. (Materials which they have developed will be available in a year.) Their staffing pattern for 70-100 children is three certificated teachers, three student teachers (from Oregon State University), and three part-time student aides. The use of student teachers has permitted the release of regular teachers to work on the development of materials. Thursday is their visitation day, but the principal should be contacted before a visitation.

\* \* \* \* \*

Charles Haggerty presented ways by which information can be acquired concerning the reading skills that children are lacking, how children can be grouped for skill instruction, and

ways in which classroom organization can be developed so skill teaching can be effectively administered.

He distributed a package, "Teaching Elementary Reading and Math by Diagnosis and Prescription." This included outlines and diagrams to assist school personnel in reaching a basic understanding of teaching by diagnosis and prescription. His summary of this approach was--

"In the early grades this approach is preventive.  
In later grades it can serve as both prevention and remediation.  
It calls for a different instructional approach, involves small groups, media, considerable self-direction.  
It requires or implies a different staffing pattern--extensive use of peer teaching and of adult aides.  
It opens up the scene for a wide variety of methods and materials.  
It lends itself precisely to accountability.  
It does great things for the morale of youngsters.  
It calls for a more efficient and more humanistic record keeping and reporting system."

\* \* \* \* \*

On the second day, participants were divided into two separate groups. One group met with Doctor Moore, the other with Mrs. Matson. The small groups were encouraged to ask questions concerning the various programs. Record keeping forms used in the programs were presented. The group had an opportunity to explore more fully the reading programs presented by Doctor Moore and Mrs. Matson. Each of the two groups had an opportunity to meet individually with the two presentors.

TEACHER SELECTION AND EVALUATION  
(Condensation of a Two-Day Presentation)

Dr. Dale Bolton, University of Washington

. . . THERE IS AMPLE INFORMATION IN RESEARCH LITERATURE THAT TRAINING AND PRACTICE WITH AN INTERVIEW SITUATION IMPROVES A PERSON'S PERCEPTION AND JUDGMENT WITH REGARD TO THE PERSON THAT HE IS INTERVIEWING. . . THE SELECTION PROCESS CAN IMPROVE YOUR TOTAL TEACHER CORPS. . . YOU SHOULD BE INVOLVED IN ATTEMPTING TO SELECT PEOPLE THAT REACT TO THE KIND OF SUPERVISION YOU HAVE IN YOUR SITUATION. THE SELECTION PROCESS HAS A TREMENDOUS CAPABILITY OF MODIFYING YOUR ORGANIZATION. IN ADDITION, IT IS AN INDICATION OF THE KIND OF DECISION MAKING THAT IS DONE IN YOUR ORGANIZATION.

Someone once said that all men feel they can do three things exceptionally well: make love, run a high school, start a fire. I once added a fourth: to select teachers and administrators. Nothing has happened to cause me to change my view that most people are good pickers of personnel. Bassett expresses this view: "Ordinary though we may be in every other respect, we take pride in the thought that at least we have been blessed with intuitive judgment regarding our fellow men."

This superior feeling as far as our intuitive judgment is concerned persists despite empiricle evidence indicating there is considerable variance in this dimension of judgment. This is true regardless of how slowly we run a hundred-yard dash, how many push-ups we can do, how long it takes us to read five pages of French, how rapidly we walk up a hill. Regardless of how difficult it might be to do certain kinds of tasks, nevertheless, most people feel that they are excellent as far as judgment making with relation to their fellow men.

Think about that a little and whether or not this particular ability is normally distributed or whether it is a skewed distribution. I have the viewpoint that, probably, it is normally distributed, but that it can be trained and that you can improve your perception as to how other people behave. In fact, Churchman criticizes those who attempt to justify their models as being in accord with intuition when he states that whatever proposition has the clear support of intuition needs to be dazzled and subjected to analysis. Most people when they are interviewing others, unless they have gone through extensive training, depend heavily upon their intuition. They go almost entirely in terms of some type of global impression that they get of people during the interview process.

The activities in which you will be engaged today are designed to allow you to reexamine your intuition with regard to the selection process. More specifically, these activities are designed to allow you to compare your perceptions of interview information with other people's perceptions. In addition, you will be asked to analyze interviews according to a system for observing and to compare this system to the one which you currently use. We will observe filmed interviews and then attempt to reach agreement with regard to what we saw.

Why we are focusing on the interview is relatively clear. First, it is almost universally used for the selection process. In a study we completed last September, we found that the interview is almost universally used in both business and industry and in education. There are some places that do not use the interview in selecting personnel, but there are very few of these. Second, the interview can be beneficial in selecting personnel, but also it can be quite misleading. And that depends upon who does it. The interview is not per se a good information collection device for selection purposes. It depends upon who does it and what the circumstances are under which they did the interview. Third, there is ample information in research that training and practice with an interview situation improves a person's perception and judgment with regard to the person that he is interviewing.

The selection process can improve your total teacher corps, especially if you have much turnover or much growth. There is considerable research indicating that selection interacts with supervision, that certain people take supervision better than others, that certain people take certain kinds of supervision better than others; and so you should be involved in attempting to select people who react positively to the kind of supervision you have in your situation.

The selection process has a tremendous capability of modifying your organization. In addition, it is an indication of the kind of decision making that is done in your organization. If a person cannot make good decisions with relation to selection, the possibility exists that he is not making good decisions elsewhere. Decision making is at the heart of what we do as administrators. This is an area where decision making can be studied, looked at, and done more than once in the same situation to see whether a person is making reliable or consistent decisions.

I assume that each of you has some kind of responsibility with relation to the selection of teachers, that your current supply of teachers is better than it has been, and that you have more teachers to select from now than you had in the past. So one of the things we want to do is to determine what happens in

an interview situation, and to describe the applicant as accurately as possible.

Description is necessary before you start making judgments. I should add, at this point, that we are dealing with only a portion of the total selection process. The interview is only one part of it; it is not the only means for deciding since we have other information from credentials, letters of application, application forms, telephone calls that we make to other people, and letters of recommendation. All of these written records are important in helping you describe a person. (Tests are not as universally used in education as they are in industry.)

Once we have described the person, it is necessary to make a prediction of how this person will behave when he is put in a given situation or assigned to a given classroom. This prediction is a separate process from the description process. If you describe a person as being a person who seems to be well organized and articulate, who seems to be pleasant and socially inclined, this is one thing; it is another thing to make a prediction as to how he is going to treat children in the classroom. So your description is used for predicting whether or not this teacher will be well organized in the classroom, will plan consistent activities, will show empathy toward children, and will be sociable and cooperative with adults. There are a lot of things you want to predict, in terms of what is important to you, from what you see in the interview situation and from what you see on written documents. Once you have placed the person in the position, you need to evaluate that person to know whether or not the prediction process based on measurement was accurate. So you have three stages of the selection process: measurement, prediction, and evaluation.

Most people do not think of evaluation as part of the selection process, but it is essential, if you are going to have a good selection process, that you evaluate in order to look back on the decision that you made and see whether it was any good--and that is the same with any decision process. Many people think that the decision process is primarily prediction. Prediction is important when you make decisions, but it is only part of decision making. The other part is collecting some information in order to know whether your decision was any good. That is why evaluation of teachers is so important, and that is why I like to tie selection and evaluation together.

[A filmed interview was shown and each administrator wrote a short description of the interviewee. Doctor Bolton commented on these as follows.] The information is separate and apart from the interpretation, and the interpretation is separate and apart from the value that you place on it. One of the



1.0



1.4



2.0



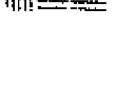
2.2



2.5



3.0



3.2



3.6



4.0



4.5



1.1



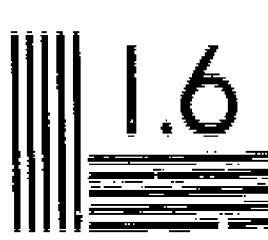
1.8



1.25



1.4



1.6

## MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS 1953-A

things that we want to try to do as we are looking at films, and as we are analyzing information from these films, is to attempt to pull apart our own cognitive process. This is a tough thing to do, to go back on something that we have been doing almost automatically and intuitively. One of the things we want to do is relook at what we are looking at.

Before we look at the film again, I want to give you a way of observing or looking at what it is that you are seeing. In 1960, David G. Ryans completed a ten-year study for the American Council on Education. He recorded that study in a book Characteristics of Teachers (published by the American Council on Education). He found that, when you start trying to describe behavior in the classroom using a certain kind of description process, there are five characteristics exhibited by elementary school teachers. (Similar characteristics have shown up in other studies in other types of situations.) I would like to look at these five factors: originality and adaptability; consistency and organization; empathy; sociability and buoyancy.

Originality is characterized by decisions such as original, resourceful, imaginative, adaptable, flexible, democratic, puts pupils on their own, encourages pupil initiative. From the standpoint of observable teacher behaviors, factor one appears to be described in terms of originality and adaptability. If you were describing a highly original teacher, you might use adjectives such as original rather than stereotyped, imaginative versus unimaginative, adaptable rather than inflexible. He might also be described as being resourceful or democratic. Think of someone in your own school district, other than yourself, who is highly creative and often divergent in his thinking--he can think of a lot of alternatives for ways of doing things. If you suggest something new, he is not likely to be a highly rigid individual; he will try it out, or he will adjust it slightly to his own personality or his own situation and try it. He is a willing, adaptable, flexible individual. On the other hand, you may have someone in your district who is rather rigid--on the other end of the scale. If you can think of people with these characteristics, sometimes it helps to fix them in your mind.

Let us look at the second one: organization, systematic, consistent. This is a person who is very responsible. He gets to work on time. He is businesslike rather than being unplanned, slipshod. The teacher who is assessed high on this factor is frequently described as systematic, well prepared rather than unprepared, definite, consistent, thorough, responsible, self-controlled rather than disorganized, vague, or haphazard. Again you might think of someone in your own school district who is relatively well organized. He handles the transition period from reading to arithmetic or mathematics very well because he

is well prepared and organized. On the other hand, you know some people who just fall apart when it comes to moving one class activity to another or, when it comes about two o'clock in the afternoon and school goes to 3:15 p.m., they have run out of activities, and it is play games and improvise for the rest of the day because they haven't prepared well what they are going to do.

Let us look at the third one: empathy. This factor seems to involve two clusters. One has to do with a warm, kindly, understanding classroom manner. The other is a tendency for the teacher to be composed and calm, and perhaps, rather easy going. If a teacher is assessed high on this factor, traits of kindness, patience, understanding, fairness rather than partiality are likely. Here is a person who has an ability to feel the way the children do. And here is a person who not only feels the way they do but responds accordingly. He is not harsh. He is the kind of teacher that children are likely to approach because they know that the teacher will not reprimand them immediately for an error. On the other hand, you can think of people who are on the other end of this scale who tend to be a little harsh with children, who are impatient because their own ego gets in the way. I should emphasize at this point that these factors are independent. Can a person, for example, be well organized and still be creative? Sure, but he can also be disorganized and be creative. These are independent factors. Likewise, empathy and sociability are independent factors.

A person who is sociable is a person who likes to be with other people. He is gregarious. At a meeting or a cocktail party, he is quite likely to meet other people on his own. He doesn't need somebody to take him around and introduce him. He meets other people easily. He likes to be around other people rather than being by himself. So the sociable individual is an individual who likes people and enjoys contact with them. He is approachable, friendly, gregarious rather than withdrawn. Likewise, he is rather cooperative, good natured and optimistic. He tends to look on the bright side and to be a genial, tactful, friendly, and approachable individual. Such a person can be separate and distinct from the person who has empathy for other people. He might be quite sociable, like to be around other people, and yet not be able to project himself into the other person and feel the way he feels.

The last factor is buoyancy. This is the factor that has a little bit of showmanship in it. A buoyant person is animated and has a pleasing voice and expressive speech. This person is very animated in his voice and gestures. He has a tendency to be alert rather than apathetic, poised and attractive rather than excitable and unimpressive.

Each of these factors is described by adjectives. This is how you describe them.

Original -- flexible, democratic, imaginative, adaptable, resourceful

original vs. stereotype  
imaginative vs. unimaginative  
adaptable vs. inflexible

Organization -- businesslike, definite, well prepared

systematic vs. disorganized  
definite vs. vague  
thorough vs. haphazard

Empathy -- warm manner, composed, calm, easy going

kindly vs. harsh  
patient vs. impatient  
fair vs. partial

Sociability -- gregarious, approachable, friendly, cooperative, good natured

gregarious vs. isolated  
friendly vs. unfriendly  
approachable vs. unapproachable

Buoyancy -- expressive, stimulating, alert

stimulating vs. dull  
animated vs. stolid  
expressive vs. unexpressive

[The filmed interview was again shown and the administrators, using the preceding material, wrote down specific behaviors which they saw that related to Ryans' character factors. Group discussion ensued.] In an individual school, you may or may not be interested in any one of Ryans' five factors, but to get you to focus on some specific information, I am using these particular five factors. If you want to use something else in your local school district, you ought to identify what it is that is important to you then look for information on those things which you consider important.

. . . So you have a kind of general, open-end question which is very open and you can have a specific, probing question where you are attempting to get at some specific information. As you look at an interview, look at the kinds of questions that are

being asked and see what is found out as a result of the open question and specific question.

[A filmed interview was again shown, and the questions were categorized as general or specific; the information so elicited was noted and discussed.

In the Tuesday afternoon session, Doctor Bolton continued directing the group in interview techniques. Ten interviews using interviewees strange to the group were conducted. On Wednesday morning, he continued with aspects of the teacher selection process; in the afternoon, with teacher evaluation.

Additional information on teacher selection will be found in the Research Reports on Teacher Recruitment and Selection, a PREP Brief available from the Oregon Board of Education, which was distributed at the presentation.] In many scientific areas, the development of knowledge has proceeded by subdividing a large area of investigation, studying the small units of this large area rather intensively, and then synthesizing the findings from each of the small areas into a whole. This approach to science has developed specialists who have certain kinds of vested interests in particular small areas of investigation. This has created a situation in which it becomes difficult to determine the relationship of the special areas to the larger scientific area. In a similar fashion, administrative practices in large organizations tend to subdivide labor and create specialists with narrow views of the total organization's operation. As time passes, a principal of a building or a supervisor of mathematics in a large system, for example, tends to carry on rituals that may contribute very little to the other subunits or to the productivity of the organization.

Systems analysis procedures tend to correct some of these by emphasizing the need to understand fully how the organization's subunits function through an examination of the total system. This systems analysis approach has affected the examination of school personnel systems--one of the current trends--and it has precipitated discussion of the relationships among these three functions: selection, supervision, and evaluation.

Let us look at one way of examining a personnel system from a total standpoint. If you look at your process totally from the standpoint of selection, supervision, and evaluation, you are involved immediately in a recruiting process. You recruit for the purpose of getting an applicant pool. Then you make a selection decision, select them into the organization. Once that has occurred, you make assignments. Assignments consist of various parts, but basically they consist of two parts, one of which is supervision and in-service training as well as the

kinds of tasks, roles, and responsibilities that an individual has. You also assign them to situations where they are going to be supervised and where they get certain kinds of in-service training. You also evaluate them. When you select a person, you provide information to the assignment situation in such a way that it allows supervision and in-service training. When you select a person, you may say, "Here is a person who is new. He has a good attitude, he is going to be enthusiastic, express himself well. He is going to be eager to do a job, but he does not know much about materials." You are going to have to supervise this person in such a way that he gets acquainted quickly with materials and equipment. You may say something different about a person who has experience.

So you provide information at the point of selection for supervision and an in-service training program. This supervision and in-service training program also provide information for evaluation. Information from evaluation goes back to your supervision program. It becomes one of the bases for your supervision program and your in-service training program. You also use the evaluation as a feedback mechanism for knowing whether or not you have problems at the selection stage. This is not used nearly as often or as well as it should be used in most school districts. These are the major phases of the personnel system: selection, supervision and in-service training, and evaluation.

You also provide information from the evaluation system with regard to selecting someone out of the system. This is a re-assignment phase, the most harsh kind of reassignment that you can have for a person, but nevertheless it is one of the purposes of evaluation. People are concerned about this and about the legal aspects of selecting people out. I would simply say, "You better be looking at your total selection process in terms of selecting people out, especially from a record keeping standpoint." One of your problems is in not keeping accurate records in order to do this on a legal basis. Make sure that your record system has information, not just a batch of conclusions, a batch of judgments. Try to keep open communication and be honest with personnel concerning record information.

Any exit from the system should have an exit interview. One of the things we found in our survey last year was that business and industry always used an exit interview whether the employee resigned or whether they released him. The exit interview also provides information to the three parts of your operation: selection, supervision, and evaluation. It tells you whether or not this person felt that he was evaluated fairly. It tells you whether or not his assignment was reasonable for him, whether or not he got the kind of help that he should have had as far as supervision was concerned, whether he wanted some other help,

and whether or not he initially was selected for the kind of a position that was reasonable for him. So the exit interview can provide information which helps to correct problems.

All of the feedback loops which you see in this kind of system are designed to correct problem areas. Most of the systems analysis procedures that you find at the present time are designed with this in mind. They are just like any kind of controlled mechanism that you might have. If you have a control mechanism on a boat that keeps a boat going in a given direction, all that it does when the boat gets off too far to the right is to say, "Make a correction." A thermostat on a wall says when the room gets too hot, "Put a little cool air in here." That is all a control mechanism does. Your feedback loops in a system do the same thing. They are designed as control mechanisms. They are not value judgments in the sense that they are saying, "good" or "bad." They are saying, "It's off from the direction you said you wanted to go. You're not going in the direction of your goal." So, what you have here is a way of looking at a total system that includes these three elements. I think that this is one of the significant trends that is occurring at the present time in the area of evaluation of teachers.

Let me shift from this to some indications of resistance that I see in the area of evaluation. There is a resistance to evaluation systems that attempt to discriminate among teachers. This is related to the conflict that I was talking about between the systems and accountability. The diagnosis of the teaching act is primarily cognitive, and it involves primarily knowledge, but placing people in categories such as "good," "bad," "above average," "excellent," or "below average" is placing a person in a category. If you do that, you get involved in the emotional aspect.

If one of the things you are concerned with is diagnosis, and I think that this is one of your primary concerns, then you are dealing primarily with the cognitive. If you are concerned with classifications or categories, be prepared to deal with the emotional. You need to consider dimensions of people's needs, both the cognitive and the emotional. As far as the cognitive is concerned, they need to know something. You as an outside observer are providing them with information. As far as the emotional is concerned, you need to think in terms of providing psychological support for people. You need to look at both dimensions.

There is some indication that teachers do welcome evaluation if the major focus is on improving rather than fault finding. Likewise, if the information produced is meaningful to the teacher. One of the reasons that administrators and teachers resist going through an evaluation is that their expertise is

out in the open. The teacher's expertise, when a principal walks into the classroom, is out in the open because that is what he is observing, her teaching. When they sit down in the post-observation conference, the administrator's expertise is out in the open because he is supposed to be helping the teacher. If he does not put forth with something that helps the teacher, she resists the next time he comes into the room. A teacher welcomes evaluation if the principal takes the necessary time to collect adequate information and to discuss it with the teacher. You need agreement on both purposes and procedures and you need to be specific. Communication needs to be honest and skillful. Conflicts need to be out in the open rather than covered up and brushed over.

Some reasons why administrators resist evaluation are--

- A lack of certainty regarding criteria, or the measurement process, or procedures for analysis and interpretation of data. If you are not sure what you are going to do with the information or how you are going to collect it, or what is important, then you are going to resist doing it.
- A resistance to placing oneself in a position of manipulating or adversely affecting other people's lives. Some people resist on this basis. If you have this as your real reason, you probably should not be in administration because it is hard to avoid the task of evaluating people.
- A fear of precipitating unpleasant reactions.
- Lack of ability to cope with the weaknesses of individuals.
- A failure to relate evaluation of others to the purposes of the evaluator. If you cannot see how this is going to help you do what you want to do, then you are going to do some things that you consider more important.
- An inability to organize time. This is not a small item. It is a large item in the large secondary school.

There are some general indicators of teacher effectiveness that seem to replicate across situations.

- The teacher makes statements that use ideas and opinions previously expressed by pupils. Flanders has found in a number of his studies that where teachers not only positively reinforce what students are saying but pick up information and use it, the students are motivated positively and seem to learn regardless of whether they are in a large school or a small school, a central city or a suburb.

- The teacher has a flexible, cognitive style. The rigid teacher will not adapt to a new situation. The person who is good in one situation and in a second situation most of the time is flexible enough to adapt his cognitive style to the new situation.
- The person who has only one or two ways of doing things is not likely to be effective in a variety of situations. Therefore, the teacher who uses a complex conceptual framework rather than a simplistic one is much more likely to be effective in a variety of situations.
- The teacher who uses some kind of advance organizer to allow people to know what it is they are going to be doing during a class period and how what they were doing yesterday is related to it so the students can tie in what they are doing to some kind of conceptual framework is much more likely to be effective in a variety of situations.

[For more help on evaluation, refer to the Research Reports on Teacher Evaluation a PREP Brief available from the Oregon Board of Education. Copies were available at the presentation.]

[Doctor Bolton concluded with a discussion of the area of administrator evaluation in which he dealt with assumptions, understandings, accountability, management by objectives, and getting started.

He said the administrator is interested in student changes in attitude, social skills, and achievement, the same product in which the teacher is interested, but his process to attain the product is concerned with administrator-teacher interaction, in-service and supervision, and improved teaching. The administrator is accountable for planning, coordinating, describing activities, implementation, maintenance, and evaluation. He must accomplish the goals of the organization and, since the goals change, his responsibilities change.

Accountability and management by objectives have two basic assumptions: the clearer idea that you have of what you want to do, the better you do. Progress can be measured only in terms of goals. In setting goals, you examine the situation, set the goals, take action, examine results, evaluate, revise and correct. In beginning an evaluation system, the administrator should be concerned with content (gives validity), format (provides reliability), and scaling (gives discrimination).]

---

## FUTURES

Leslie G. Wolfe, Educational Coordinates Northwest

One month preceding the conference, the director of the Small Schools Program sent to each participant a Delphi instrument based on 17 questions projecting educational futures.

The Delphi technique was developed and refined by the RAND Corporation, Santa Monica, California. It is a method of systematic solicitation and collection of expert opinions and is applicable whenever plans for the future have to be based on informed judgment. The concept of the Delphi technique can be described by the following example. Each "expert"--teachers, principals, and superintendents--was asked to estimate the year when nontoxic, nonhabit forming drugs would be developed and used to enhance learning. The responses consisted of a series of estimates spread over a time interval ranging from 1970 to 2050 to never. The interquartile range was computed to determine the interval containing the middle 50 percent of the responses. This allowed each participant to compare his estimate of each event with the middle 50 percent responses.

The purpose of this technique is to minimize the influence of certain psychological factors that normally over influence the decision-making process. The intent is to reduce the tension caused by specious persuasion, unwillingness to abandon publicly expressed opinions, and the bandwagon effect. This technique offers an alternative to the traditional committee consensus approach.

The original plan for the presentation was to have the participants develop a set of strategies that would keep each of these events from happening or would facilitate their entry into the educational process if they were deemed to be desirable. The purpose of the exercise was to demonstrate that the future is controllable and change does not have to be disruptive if future events can be anticipated and strategies developed.

Unfortunately, most of the participants did not return the Delphi instrument until the first day of the workshop which did not allow sufficient time for computation. For this reason, the results of the same questions answered earlier by school administrators who were not necessarily a part of this program were used. The exercise, therefore, was not as personally meaningful for the small school participants.

A discussion and answer period allowed participants an opportunity to exchange ideas and clarify concerns about the "futures process."

During the second part of the presentation participants were asked to respond to four questions, one question at a time, each question building on the answer to the preceding question.

The first question asked individual participants to list what they felt society would be like in the year 2000 when present students will be 30 to 40 years old. The participants were then asked to respond to the question: what attributes will people need to live in the society you projected for the year 2000? The third question asked the participants to list what their schools should be doing now to prepare students to live in the world they projected. The fourth and last question asked the teachers to list what they should be doing in their classrooms now to help prepare their students for the year 2000.

Again, this session was followed by a lively discussion and answer period.

---

#### INTRODUCTION TO BEHAVIORAL OBJECTIVES

Two concurrent sessions on behavioral objectives, one for elementary educators and one for secondary educators, were conducted by Glenn Brostrom and Leslie Wolfe on Monday afternoon. The sessions were conducted according to the following learning package. Since both sessions were well attended, the participants worked in groups on the listed performances.

##### SUBJECT--Behavioral Statements

CONCEPT OR IDEA TO BE LEARNED--To learn how to recognize and write behavioral objectives.

OBJECTIVES--(Performances expected to ensure that concept has been learned)

1. The learner will be expected to demonstrate his ability to differentiate between "illustrative verbs" and non-illustrative verbs by circling 90 percent of the "illustrative verbs" out of a list of 50 verbs.
2. The learner will be expected to be able to recognize and/or write with 90 percent accuracy statements that include the "Criterion of performance."

3. The learner will be expected to recognize and/or write statements that include "conditions of performance" with 90 percent accuracy.
4. The learner will be expected to combine "illustrative verbs" with the "criterion of performance" and the "conditions of performance" to write with 100 percent accuracy 10 behavioral objectives.

PRETEST--If you think you can do the above objectives, obtain a pretest from your teacher. The following activities are suggested to you as ways to achieve the objectives.

LEARNING ACTIVITIES--(May be selected by you or assigned by your teacher)

1. Listen to lecture by the instructor.
2. Divide into groups of six and complete learning experiences one, two, and three.
3. In your groups of six help each other write 10 behavioral statements for your subject matter area.

POST-TEST--After completing the learning activities, ask your teacher for the post test.

QUEST SUGGESTIONS--Since you passed the pretest, you need not do the learning activities. You may wish to go on to the next learning package or study an activity of your own choosing.

[A condensation of a student paper on behavioral objectives is in Part 3 of this report.]

---

#### MEDIA IN CURRICULUM DEVELOPMENT

##### Institute Media Center

Dr. Wright Cowger, Willamette University

The major purpose of the Institute media center was to provide "hands on" opportunities for teachers and administrators to use some of the hardware and software found in most school districts today. The center provided a model, in a sense, for nonprint media services which should be available to students and teachers in all schools.

Does your school provide for these basic processes?--

Dry mounting and laminating

Photocopying--35 mm slides from books, real life, etc.

Overhead projection transparency production--thermal, dry mounting photo, diazo

Graphics--Lettering systems (letter guides, rub-on, cut-out Stik-A-Letter), pens, inks, construction papers, drafting table, sign making system

Copy systems--3M, Xerox, Apeco, etc.

Closed circuit television--One-half and one-quarter inch tape portable systems either battery operated or AC powered  
(Can you video-record a significant program for later playback in classes?)

Microform readers and reader-printers

The Institute media center made available three complete, one-half inch, closed circuit television systems. Several participants designed short instructional programs and produced tapes during the workshop. Others spent some time developing personal skills in the use of the various media processes listed above.

#### Use of Media in Curriculum Development

At a session for librarians, Dr. Wright Cowger told the story of the Hawaii Curriculum Center and its multi-media English language curriculum project. The purpose of this presentation was to emphasize that instructional materials specialists must take an aggressive, active role in curriculum design and evaluation. Doctor Cowger questioned the traditional "service" role for libraries and audiovisual units; service connotes an image far too passive.

Media specialists must not simply provide and operate systems for the ordering and handling of instructional materials requested by students and teachers. Their new role requires them to be involved in the design, creation, and evaluation stages of instruction. The Hawaii Curriculum Center's English project is a fine example of a merger of the talents of instructional experts and media specialists.

[ "Starting a Media Center in a Small High School" is the subject of a student paper carried in Part 3 of this report.]

## MANAGEMENT STRATEGIES

The Independent Evaluation Report, Oregon Small Schools Program\* and some of the instruments used in compiling information for it were presented by Leslie Wolfe, Educational Coordinates Northwest, in this session. The major purpose of the assessment was to establish baseline data which could be used to determine the extent to which the Oregon Small Schools Program is meeting its objectives.

The data gathered pertained to three areas: the extent to which member schools have implemented methodological and organizational changes; the climate for change which has been established; and the extent to which the schools are moving toward implementation of Oregon Board of Education objectives. Data were collected from all member schools as of December 1, 1970. Additional data were collected by classroom observations in twenty elementary and secondary schools selected at random. This sampling included schools in all regions of the state and schools with a full range of enrollment. All of the teachers and administrators in the sampling responded to an instrument designed to measure the organizational characteristics of the school.

Although Mr. Wolfe could not present all the study findings, he did comment on some. He cited the following findings on instructional methodology observations:

- The extent to which teachers utilize strictly teacher oriented instruction is somewhat below the averages found in other studies. The 22 percent observed seems a realistic and appropriate proportion.
- Students were observed spending 25 percent of their classroom time working on assignments with no evident interaction with the teacher or each other.
- Little evidence of the use of media was observed.
- There was relatively small use of the small group process.

---

\* A loan copy of this report is available on request from the Oregon Small Schools Program, Oregon Board of Education, 942 Lancaster Drive NE, Salem 97310.

The random sample of student perceptions on implementation of Oregon Board of Education objectives indicated that students felt they had an opportunity to practice self-discipline in the classroom and that teachers and counselors talk to them about self-discipline from time to time. Half of them indicated that they seldom if ever recognized that the school was making an effort to help them discover their individual interests. They said an effort was being made in all their classes to study environmental conditions. Seventy percent felt that half or more of the school curriculum will be helpful in the world of work; 80 percent felt that half or less of what they learn has relevancy to their real life concerns; and 90 percent said that examples from the world of work are used in their classes less than half of the time. Most of the students (80 percent) had heard about "clusters of occupational choice," but 70 percent said that the career cluster concept is seldom or never discussed by their teachers. Mr. Wolfe commented here that these findings indicate what the students think is true; he questioned whether it was the right story.

Mr. Wolfe then pointed out that the basic assumption of the report is that organizations, schools, and people, and their ability to function effectively, are similar and related to those problems identified in research on organizational development and change. For the purpose of assessing the Oregon Small School Program schools' readiness for change and factors of internal organizational health, two models were used: one developed by Rensis Likert at the University of Michigan The Profile of Organizational Characteristics and an adaptation of a study conducted by Matthew Miles of Columbia Teachers College, the Norm Setting Profile. The Likert instrument measures teacher perception of six characteristics of organizational health: leadership, motivation, communication, decision making, goal setting, and control.

Samples of the instruments used for the study of organizational characteristics were distributed and discussed by the group. These are carried in the report itself.

THE MANZANITA PROJECT: FOCUS ON THE INDIVIDUAL CHILD

Charles Barker and Lale Fallow, Manzanita Elementary School

The Manzanita Project is an attempt to bring together a many faceted program that puts the focus on the individual child. It recognizes that students differ in abilities, backgrounds, readiness and learning styles and that educational agencies must establish a program that compensates for such differences.

The program encompasses four major elements: (1) an open-area concept building structure, (2) a differentiated staffing pattern, (3) an individualized curriculum, and (4) a systematic instructional sequence.

The design of the classroom buildings is hexagonal with two open triads. Each triad houses a single grade of 65 to 100 students. These open areas allow for a flexibility in student-teacher movement to various activity centers for individual, small group, and large group instruction.

To be accountable for achievement of the individualized program and to assure ourselves that certain methods will be practiced to meet this end, a differentiated staff composed of an instructional leader, a staff teacher, and two aides serves each grade. A job description for each position is written, and the instructional leader is responsible for all activities in that grade. The instructional leaders are on eleven-month terminating, one-year contracts which hold them accountable for achieving the elements of their job descriptions. This staffing pattern gives an opportunity for those wishing to advance to stay in the instructional area instead of having to go to opportunities outside the classroom such as supervision or administration.

The third element involves individualized curriculums in reading, mathematics, and the mechanics of writing. These individualized curriculums provide each student with materials that enable him to learn the specific skills he needs. In so doing, he utilizes his own unique learning style while progressing at his most productive rate.

The fourth element is a systematic instructional sequence. To attain this, hierarchies of skills for reading, mathematics, and mechanics of writing were developed. For each skill delineated, a specific instructional objective was written. The project then developed pretests and post-tests for each objective. The child is tested to determine if he has a specific skill. If he passes the pretest, he progresses to the next skill. If he

fails, he is cycled into a learning package (program management unit) developed for each individual skill. The unit consists of at least two alternate routes that will enable him to learn the specific skill.

Since research has shown that the practice of ability grouping usually produces a negative self concept in students, no ability grouping for instruction is used in the Manzanita program. Students are grouped only according to need.

Through a systematic approach to instruction, we are assured that desirable procedures such as pretesting and post-testing, diagnosing and prescribing, and necessary record keeping will be done.

The program does not depend upon the utilization of basal texts. Trade books are the tools for teaching reading; the program management units are used to teach specific skills in reading, mathematics, and writing.

In summary, the Manzanita Project is an attempt to enable each child to use his unique learning style to attain the highest level of achievement commensurate with his specific individual differences.

---

#### EFFECTIVE DISCIPLINE IN SCHOOL

Dr. Robert P. Selby,\* Woodlawn Elementary School, Portland

The current school situation can be changed for the better. Academic output can be greatly increased while disorderly, non-productive behavior can be considerably decreased. Such changes will not require much money but they will require a considerable change in our ways of feeling, thinking, and acting. What is needed is a rediscovery of humanistic values and widespread application of derived techniques to be tested in action.

---

\* Doctor Selby's book Effective Discipline In School is available from the OSSP professional library.

The basic principles of the "effective discipline" method are--

- Human behavior is purposeful, not random, not predetermined or mechanistic. The purpose of human behavior is to meet basic needs and reach for self-actualization.
- Human behavior is largely learned; hence can be unlearned and other behaviors learned in place of the unlearned behavior.
- Human behavior is determined by each individual's unique perception of alternative actions. Environment provides the scene, and heredity provides the biological equipment with which the individual operates within that scene. Environment and heredity are limiting factors. Perception is the determining factor.

People act the way they do because they have learned to do so through their personal experiences and interactions with other human beings. They have found the demonstrated behavior most likely to achieve their purpose although it is quite unlikely that they know what it is.

Teachers need to learn to read behavior and purposes of the behavior. A basic law of human existence is survival. If the individual survives, safety and order are needed. If he has safety and order, belonging and friendship are needed. If he has belonging and friendship, then respect and esteem are needed. If the individual obtains all these basic needs, then he goes on to actualize his self. Children work on these, and teachers should observe their progress as it often explains the purpose of their behavior and may offer clues to possible devices for changing undesirable behavior.

Constructive behavior can be increased, and destructive behavior can be decreased through consistent, persistent planning and action taken in specific steps:

1. Observe the interaction between the persons involved-- pinpoint the behavior.
2. Develop a working hypothesis or "hunch" as to the purpose of the behavior and the needs to be met.
3. Pinpoint one behavior.
4. Count the behaviors before you take any action and chart the rate of occurrence.
5. Work out a plan to influence the behavior of concern, then act.
6. Count the behaviors that occur as you put your plan into action and chart the rate of occurrence.
7. Study the data, relationships, and patterns revealed to replan as needed.

Encouragement and consequence are more appropriate and effective techniques than reward and punishment. Unless the child's concept of self is that he can achieve in the classroom, he will be a "won't do" individual. Anxiety and tension are two of the worst enemies of learning. Relaxation can be used to break these. Never fail to encourage children for the good things they do.

Cooperation now has more survival value than competition.

Emotions can be directed in a way that will help a person meet his basic needs and move toward self-actualization.

Habits of acting that have high survival and even self-actualizing value, both in the present and the future, must be over-learned in advance of use in a critical situation.

Experience must be recorded and examined in such a way that the lessons it has for us can be learned with a minimum of pain and error. Only by examining the data of experience as it really happens, can we differentiate between what we think happens and what really occurs.

---

#### QUESTIONING STRATEGIES

Dick Kemper, Keizer Elementary School, Salem  
Arlene Fallen, West Salem Elementary School  
Julius Bialostosky, Multnomah County IED

Asking questions is of particular concern to teachers as they attempt to develop their own teaching style. Throughout the day they ask questions to check on content, behavior, involvement; to clarify procedures, perceptions, and processes; to assess values, meanings, assumptions, and purposes. How to involve pupils in discussion, how to assess understanding, how to evaluate progress, how to check on readiness are concerns that lead to the use of various types of questions.

Reference was made to J. P. Guilford's work, entitled Structure of the Intellect, 1959, wherein he identified more than one hundred different kinds of intelligence which could only be tested through a variety of questioning procedures and Flander's Interaction Analysis which indicated that classroom teachers spent most

class periods lecturing. Therefore a knowledge of questioning strategies would be helpful.

The participants were divided into two equal sections. Each of these groups was involved in two sessions relating to the strategies developed by Hilda Taba, San Francisco State College, and James Gallagher, University of Illinois. A summary of each presentation follows.

• The Hilda Taba Social Studies Program, Contra Costa County, California. This program assumes there are major understandings in the social studies which all children should acquire, content and activities to develop these understandings may vary with different groups of children, and major concepts should be developed sequentially throughout the elementary program. Study skills should also be developed sequentially.

Units in the program are designed to develop multiple objectives which represent several kinds of growth:

Basic Knowledge	)	Facts	
	)	Ideas	
	)	Principles	
Critical Thinking	)	Interpreting Data	Logical Thinking
	)	Developing Generali-	Drawing Inferences
	)	zations	
	)	Application of Facts	Evaluating Evidence
		and Principles	
Attitudes, Feel-	)	Cultural Differences	
ings Sensiti-	)	Dignity and worth of all people	
vities	)		
Skills	)	Academic	
	)	Group	

The objective of knowledge is implemented largely through choice of content while objectives of thinking, attitudes, and skills are implemented through the learning activities offered.

Each unit is arranged around main ideas or generalizations which serve as organizing points for appropriate content. Each generalization is supported by several samples of content which allow children to make comparisons and see contrasts. An important feature of the units is the two kinds of sequences. One sequence is that of content. Some of the main ideas are developed within the content of a single unit. Larger concepts, such as the concept of interdependence, thread through all units. The other sequence is that of abilities or powers represented

in the objectives of thinking, attitudes, and skills. The learning experiences are arranged in a sequence designed to cumulatively increase the level of performance both within the unit and across several units.

• Gallagher's Questioning Strategy is based upon the premise that the classroom teacher is the key to productive thinking. If the teacher does not initiate the right kind of questions, most of the thinking on the part of students will be basically memory and rote.

The various types of questions developed by Doctor Gallagher include cognitive-memory, convergent, divergent, and evaluative questions such as the following:

Cognitive Memory Questions - Call for facts.

1. What is largest city in Oregon?
2. Name the ABC countries of South America?
3. What do we do to get the sum of two numbers?  
What is the name for . . . . . ?  
Who is . . . . . ?  
Where is the . . . . . ?  
Describe . . . . . ?  
What is a . . . . . ?

Convergent Questions - Call for integration of a given or remembered data and require some reasoning.

1. What is there about the location of Portland that accounts for its importance?
2. In what ways are these two countries alike?
3. Why is abundant rainfall important to Oregon's economy?  
Explain how this could happen. . . . .  
Tell us why you think so.  
Give your reasons for such a judgment.  
How did you reach that conclusion?  
Why is it called . . . . . ?  
What conclusion have you reached . . . . . ?

Divergent Questions - Call for creativity and imagination.

1. How might the lives of people in Portland be different if the city were located in the torrid zone?
2. What might happen if suddenly all the electric power were shut off for a week?  
What would happen if . . . . . ?  
How many ways can you . . . . . ?  
Give me all of the reasons you can think of . . . . .

Present as many possible solutions to our problem as you can . . .

Give all the synonyms you can think of for . . . .

Evaluative Questions - Deal with matters of judgment, value and choice.

1. Would you prefer to be a North American cowboy or a South American gaucho?
2. Would you prefer to live in a city or on a farm? Why?
3. What do you think is the best means of transportation to travel from Portland to Chicago?
4. What do you think about the way we have organized our science work in our class?  
What is the most important . . . . ?  
Name the two most influential causes . . . .  
What are the chances that . . . . ?  
Give an estimate of . . . . .  
In your judgment, what is the best course of action . . . ?  
What do you think of my choice?

The implications for the use of these types of questions for both student and teacher are as follows:

#### Cognitive-Memory

##### A. Teacher Strategy

1. The teacher can prepare for this instruction by learning isolated facts and presenting them to the students.
2. A small fund of past knowledge is required by the teacher for this procedure. Integration of curriculum areas such as economics and sociology, or biology and chemistry, are not important.
3. Students will be evaluated on memory of isolated facts or to another situation.
4. Discussions relying upon imagination or originality seem out of place.

##### B. Student Strategy

1. Adopt an attentive and passive role in order to absorb effectively the bits of information presented.
2. Become teacher-oriented so as to grasp the direction of the facts that will be included in the evaluation.
3. Ignore possible implications or transformation of the facts as they will only confuse him.
4. Construct a black and white world of the content matter under discussion where correct information and incorrect information represent the important distinction.

5. Pay attention only to reference sources that the teacher has clearly indicated as the determining source.

### Divergent Thinking

#### A. Teacher Strategy

1. The teacher may expect a wide range of possible associations to a given problem.
2. More time will be spent on a particular topic.
3. The teacher will be expected to know the topic reasonably well in order to handle the broad discussion that follows.
4. This approach provides the opportunity to consider many systems, or the comparative value of a variety of answers to a problem.
5. The student is freed from concentration on the one right answer and permitted to think the "unthinkable" thoughts necessary to create abilities.

#### B. Student Strategy

1. Attempt to prepare for more than one line of inquiry on a particular topic.
2. Explore and try out freely tentative answers with the understanding that critical evaluation will not be immediately applied.
3. Develop his own structure or perception on the content field rather than continually attempting to worm into the teacher's view since evaluation in terms of clear-cut "right" and "wrong" is unlikely.
4. Prepare more thoroughly since the teacher's judgment is more likely to be based on the original or unique answer, or a broad number of answers.

### Convergent Thinking

#### A. Teacher Strategy.

1. The teacher will be expected to help the student learn operational sequences.
2. Concentration will be on the ability of the person to reason, either to defend a position or solve the problem.
3. The emphasis will be on narrowing in or extracting from available data the logical conclusion or the proper answer.
4. The concentration of instruction will be on learning the system rather than evaluating the system. Scant consideration is given to the possible alternative systems or models that might be used.
5. This approach means that the teacher expects an active role to be played by the student. The student is expected to practice these operations as in grammatical English and advanced phases of mathematics.

B. Student Strategy.

1. Learn the system of operations that are being applied.
2. Become a problem-solver in which the task is to apply the proper operations at the proper time.

Evaluating Thinking

A. Teacher Strategy

1. Emphasis in this area is on dimensions of judgment.
2. Decision making is based on criteria, such as those established for a good book report.
3. The basis for judgment is not obvious and one of the major tasks of the teacher is to make explicit the dimension along which the judgment is being made.
4. The teacher may expect a good deal of argumentative type of behavior. More debating and contradicting is accepted in this type of class session than in a class session dealing with problem solving.
5. The teacher needs to be actively aware of the various dimensions of judgment being used in discussion.
6. The teacher cannot expect 100 percent consensus as a goal, but rather an understanding of the criteria behind the judgment and the means by which judgments are obtained.

B. Student Strategy

1. Make explicit the basis for his judgment.
2. Develop criteria and reasoned argument to support that criteria.
3. Disagree with and debate other students.
4. Become more understanding of how it is possible for honest observers to hold opposing values.

For a review of questioning strategies view the film "No Two Alike" by Gallagher and the Beaverton video tape "TABA Methodology."

---

LANGUAGE ARTS/SOCIAL STUDIES MINI-COURSE

The Community As a Classroom

This mini-course conducted by Charles Scharff, Department of Education, Oregon State University, presented the concept of using the community as a learning center. Participants, in four groups, then explored the concept on their own using the Salem community as the learning center. Each group reported its findings, overviews, difficulties, mistakes, and suggestions as to how projects or activities involving student and community interactions could best be effected. Several wrote papers on the concept in which they told how they planned to use it with their students. (Two of the shortest papers are in Part 3 of this report.)

Some of the reasons why teachers need to take their students out of the classroom and into the community as listed by Mr. Scharff in his introduction to the course were--

- Schools are no longer the center of intellectual stimulation as in an agrarian society.
- The essential skills are usually taught in the elementary school or on the job.
- Students need more opportunities to see self-actualized people that they can use as models.
- In order to make intelligent choices as to what he will learn or remember, the student needs to visualize the multiplicity of roles, obligations, and interactions related to any occupation.
- In an oblique way, this concept is a means of getting organizations, professions, and institutions to assume their neglected responsibilities in education.
- Teachers need to become aware of the real needs of society and the perceptions of their students.
- Isolation breeds suspicion. We need a sympathetic and appreciative public.

"IT SEEMS EXTREMELY IMPORTANT TO ME THAT STUDENTS WHO HAVE NOT YET DECIDED UPON A CAREER SHOULD REMAIN CONSTANTLY ALERT FOR THOSE RARE INDIVIDUALS WHO DERIVE REAL FULFILLMENT AND LASTING ENJOYMENT FROM THEIR WORK--BE THEY COMMON LABORERS, CLERKS, OR CORPORATION PRESIDENTS. AT THE SAME TIME, STUDENTS SHOULD DEVELOP AN AWARENESS OF, AND AN APPRECIATION FOR, REAL ARTISTRY AND CRAFTSMANSHIP IN THE PERFORMANCE OF EVEN ORDINARY SKILLS. THE RECOGNITION OF WORTHWHILE MODELS AND STANDARDS IN THE WORLD OUTSIDE THE CLASSROOM SHOULD BE A CONSTANT, PRIMARY GOAL."

## VOCATIONAL/TECHNICAL MINI-COURSE

The Vocational/Technical mini-course was concerned with two topics: (1) administering and interpreting the GATB test and related career development and (2) programmed learning and learning packages. For information on the GATB test see the paper "Implementation of the GATB" in Part 3 of this report. The GATB presentation was by Richard Young of the State Employment Division.

Programmed learning and learning packages were presented by Dr. Larry Heath, Associate Professor of Industrial Education, Oregon State University. He said that individualized instruction is a process to focus the attention of educators on the educational needs of each student. Methods for accomplishing this were explored. Programmed learning, learning packages, prescriptions, and contracts were discussed as general approaches and illustrated. Details of the ICE (Individualized Curriculum for Electronics) program were explained. This program is being used in Oregon community colleges. It was developed under the direction of Doctor Heath who will supply information and a sample learning package upon request.

### Learning Package System - Basic Format

The basic format for a learning package system as presented by Doctor Heath is as follows:

#### 1. Title and Package Number

The title should be a short, descriptive, inviting statement of the contents of the package.

Name \_\_\_\_\_

Date Started \_\_\_\_\_

Date to be Completed \_\_\_\_\_

Time to Complete \_\_\_\_\_

#### 2. Purpose

This is the rationale, in the student's terms, indicating why he should learn the contents of this package. One paragraph should be enough.

### 3. Tests (Pre)

All of the tests for each package should be as equivalent forms of the same test. The pretest should be a regular part of the learning package and should be taken before the student starts on the package. If the student scores at the criterion level, he should skip the package. The criterion level may be set by the individual teacher. In some cases, levels of 80 percent are sufficient; other times, 100 percent may be required. It must be made clear to the student in either a general statement (for all packages) or specific statement (for each package) how well he is expected to do on each item. He may elect to use the package to learn the parts of the pretest that he did not perform at level on or he may elect to do the entire package. All of the tests should reflect exactly the objectives of the package. Answers for the pre- and post-tests should be available from the instructor. Self test answers should be in the package.

### 4. Learning Objectives

The learning objectives should be stated in behavioral terms and contain three basic elements:

- a. The type of performance expected of the learner.
- b. The conditions under which the performance will be measured.
- c. The proficiency level expected of the learner.

### 5. Directions

Specific instructions for proceeding in each individual package should be stated.

There may be a standard statement such as:

Directions: Complete the following learning opportunities in any order you wish. You may take the self test whenever you feel ready.

or

Directions: You should complete items 1, 2, and 3 in sequence and then do any of the other learning activities you wish.

It is important to help the student see exactly how to proceed when he picks up a package.

## 6. Learning Opportunities

- a. This is a listing of the activities a student may engage in to learn the above stated objective(s). The activities should be as diversified as possible and provide for a broad range of interest and ability levels. The Information Summary sheet should be listed as one of these learning opportunities.
- b. Reasons, in student terms, for each learning activity should be clearly stated. This helps the student decide exactly which learning activities he will do.

Areas to consider for (a) and (b):

<u>Sources</u>	<u>Reasons</u>
<u>Materials:</u> Textbooks, periodicals, pamphlets, laboratory experiments, worksheets, information sheets, exercises, charts, projects, etc.	Clearly summarize what is presented in each activity.
<u>Media:</u> Films, filmstrips, records, tape recordings, film loops, video tapes, pictures, etc.	
<u>Methods:</u> Large groups for media, small group for discussions, teacher-pupil conference, individual research in resource center, etc.	
<u>Grob:</u> Applications of Electronics pg. 33-35	This gives a general description of how a transistor amplifier circuit processes the signal.

## 7. Information Summary

All concepts required to meet the objectives should be clearly and concisely explained in the package. This explanation should serve as a summary of the ideas the student is asked to learn in the package. Additional references are specified under Learning Opportunities. These should be selected to supplement the Information Summary statement. Each package needs to be a complete

7. Information Summary (cont'd.)

source of the information for the student. This summary should be listed as one of the learning opportunities.

8. Self Test

This should be constructed as described under pretest. Be sure to make the pre, post-, and self tests as equivalent forms of the same test. The self test should be a regular part of the learning package. Answers to all self test questions should be in the package.

9. Post-Test

See pretest and self test. For each item of the post test, there should be instructions for additional information, or what to do to relearn, if the question is missed.

Optional

1. A pretest might be given for the following unit to see if the person may have picked up enough additional information to skip the next package. This can be done for systems that are designed on the linear model.
2. For parallel designed learning systems, the student should be given a list of choices for which he is qualified at the conclusion of each package.
3. Quest: Activities may be defined that take the student beyond the stated objectives. These activities can lead the student to other closely related topics or into greater depth in the topic being studied. Quest is an optional activity.

---

MATHEMATICS/SCIENCE MINI-COURSE

The Laboratory Approach to Mathematics

Dr. Oscar Schaff, University of Oregon  
Scott McFadden, Eugene Public Schools

There are three general but rather distinctive approaches to the teaching of mathematics: the lecture method, the textbook method, and the laboratory approach. A learner of mathematics should have experiences with all three approaches; however, teachers neglect using the laboratory approach. Mathematics educators have been advocating a liberal use of the laboratory approach since 1900. Why then is it so seldom used? Possibly teachers are not quite certain what the approach is. The purpose of the mathematics sessions of the institute was to discuss this approach and to give examples of it in operation.

Some characteristics of the laboratory approach are:

- Student activity is central rather than a lecture.
- Unlike the usual textbook method students initiate, and to some extent determine, the direction of their learning activities. The activities are usually discovery oriented but at times may be for the purpose of drill.
- Laboratory sessions may involve the entire class, small groups within the class, or single individuals.
- Laboratory sessions involving the entire class make allowances for a wide range of individual differences. Every individual in the group is actively participating in a significant way.
- Considerable preparation time is necessary for planning laboratory sessions but during class time there is low teacher visibility. The teacher moves about the room giving guidance where needed and observing students in action. Most of the remarks the teacher makes depend upon the immediate feedback from the students.
- The lesson plans for a laboratory lesson must allow for flexibility and should include key, open-ended questions.
- Laboratory activities are usually closely related to the physical world and must be within the students' perceptual domain. There are many opportunities for relating mathematics and science. Much use is made of audiovisual and manipulative devices.

- Students are assisting and questioning other students during class and small group discussions and during work periods.

- Laboratory sessions are problem solving sessions where students are expected to define problems, determine strategies, and check answers.

At the beginning of the session the institute participants were asked to act as students and to participate in some laboratory activities. These activities were new to most of the participants yet could be used with their own students. These activities were:

- Five square puzzle--small group activity involving cooperation, observation, and strategy.

- Multiplication exercises and patterns--an individual activity.

Work the exercises below. Observe the patterns and then create exercises that behave the same way.

(a)

$$\begin{array}{r} 32 \\ \times 46 \\ \hline \end{array}$$

(b)

$$\begin{array}{r} 23 \\ \times 64 \\ \hline \end{array}$$

(c)

$$\begin{array}{r} 24 \\ \times 84 \\ \hline \end{array}$$

(d)

$$\begin{array}{r} 25 \\ \times 50 \\ \hline \end{array}$$

(e)

$$\begin{array}{r} 26 \\ \times 52 \\ \hline \end{array}$$

(f)

(g)

$$\begin{array}{r} 462 \\ \times 36 \\ \hline \end{array}$$

(h)

$$\begin{array}{r} 27 \\ \times 54 \\ \hline \end{array}$$

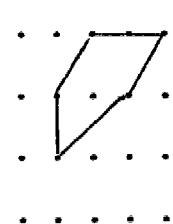
(i)

$$\begin{array}{r} 28 \\ \times 56 \\ \hline \end{array}$$

(j)

(Note to the reader. You can catch some of the spirit of the laboratory approach if you try the exercise above. After you find the pattern, try proving it. Notice this activity involves drill as well as exploration.)

- Grid points and polygons--total group activity.



There is a relationship between the area of a polygon, the boundary points and the interior points.

(Note to the reader. Try several yourself. See if you can discover the relationship.)

In the next session, participants were given examples of laboratory lessons for secondary students. A sequence of exercises was given which would guide students as a group toward the discovery of the pythagorean relation, the nature of the sequence allowed for side trips for individual explorations of other related relationships. Investigations involving the spring, lever, pendulum, inclined plane, and thermometer scales were discussed. These experiments require students to collect data, graph data, and search for relationships. Such activities are excellent for an introduction to the study of functions.

A series of mathematics laboratory sheets used in McFadden's and Schaaf's classes were distributed and discussed. Opportunities were given for the participants to examine materials and devices. One book that should be especially helpful to teachers is: Kidd, et al. The Laboratory Approach to Mathematics, Science Research Associates, Chicago, 1970.

The participants had many opportunities to ask questions concerning the role of the laboratory approach in mathematics instruction and to share with each other some of the activities they found successful in their own classes.

\* \* \* \* \*

#### "Cake and Eat It, Too"

Jean Stromquist, Jackson High School, Portland

Because of the wide range of student abilities in each mathematics class, the Jackson High School mathematics department wished to make their program better fit individual needs of the students. On the other hand, they did not wish to go into completely individualized programs at the expense of losing teacher-to-pupil, pupil-to-teacher, and pupil-to-pupil communication. In fact, the group wished "to have their cake and eat it too."

The result of this thinking was the Jackson MI program. The three freshmen courses--general math, introduction to algebra, and algebra--are broken down into two-week teaching units. The assignments and study suggestions are given to the student at the beginning of the unit. The assignments are from regular texts, but to as large an extent as possible, programmed learning materials are included for further study.

When the assignments are finished for the unit, and the work is checked by student or teacher, the student is offered a

practice test and, if successful, the unit test. If the score is an A or a B, the student may move into another group and start the next unit. In any event, each student is tested by the end of the unit; if scores are low, he repeats the unit.

In conjunction with the program a form of the CAM (computerized achievement monitoring) tests as developed by Stanford University are being used.

Jackson High School feels very fortunate to have the help of the Multnomah County IED data processing department to help in scoring, recording, furnishing student feedback, and forecasting the next unit. The program was initiated and carried on for the first two years without the computer program. This required records to be kept on 3 x 5 cards, or some other form. Forecast cards for student information were printed in advance and completed by hand by the teacher.

In the four years of the program's operation, the group feels that it has been successful. For the most part students, parents, and teachers all seem happy. The number of student failures has gone down, and the city-wide algebra test scores have been consistently higher than before the program started.

\* \* \* \* \*

#### Mathematics For The Non-College Bound

James Norton, Multnomah County IED

Under the present K-12 curriculum, almost every student takes the same mathematics sequence through the eighth grade. Beginning with the ninth grade, those who are college bound mathematics, science, or engineering students take algebra, geometry, advanced algebra, trigonometry, and pre-calculus. Those less capable, mainly the terminal students from the 25th to 55th percentile, take general math in the ninth grade. There is no other mathematics for them beyond this course.

Based on the assumptions that mathematics is a skill which is as much needed as communications skills, and that there should be at least three years of mathematics offered, if not required, an attempt is being made to fill the aforementioned void. The attempt is as yet feeble, but the following recent material is worthy of attention.

- Oakland County Mathematics Project, Pontiac, Michigan. A three-year program for the student from the 25th to 55th percentile. Presents practical mathematics, including some algebra,

geometry and trigonometry, and consumer mathematics, from a user oriented approach with many practical problems. Inquire McKay Press, Inc., P.O. Box 408, Midland, Michigan 48640. First two years is complete. Third year is in preparation.

• Vocationally oriented mathematics textbooks from Delmar Publishers including a textbook Basic Math Simplified with accompanying practical problems workbooks in automotive, carpentry, electrical, machine, masonry, printing, and sheet metal trades. Also textbooks in machine shop mathematics, mathematics for sheet metal fabrication, mathematics for plumbers and pipefitters, and merchandising mathematics. Inquire Delmar Publishers, P.O. Box 5087, Albany, N.Y. 12205.

• Numerical Trigonometry, a textbook developed by teachers in the Portland Public School district. (Curriculum Publication M-37). Inquire Portland Public Schools, 631 N.E. Clackamas, Portland 97208.

\* \* \* \* \*

#### Man: Nature's Most Dangerous Animal

Irma Greisel and Peter Jensch, Gresham High School

The basic format of this two-year-old course is contained in a text, written by the two teachers involved, entitled Man: Nature's Most Dangerous Animal. The course begins by reviewing the current problems facing the human and his ecosystem and then focuses on a highly detailed study of the native environment. It aims to develop in each student an environmental conscience--a knowledge of which human activities are compatible with the environment and which are harmful and to be avoided.

Unusual methods which are employed in reaching this objective include:

• Taking each field survey twice. At the beginning of the course, a trip is taken to familiarize the student with the entire area to be studied and to collect data that can be used to take the entire ecosystem apart to explore its functioning. The process of taking the system apart is later accomplished in the laboratory where water, for example, is studied. The molecule itself and its unusual properties are probed. Qualities of water are determined such as the ion content, the amounts of dissolved oxygen, carbon dioxide, solids, pH, organic matter, coliform count, and private, municipal, and industrial waste content. Water organisms including specific plants, fish, waterfowl, amphibians, and insects are studied simultaneously

with the study of water qualities to demonstrate the effect of the qualities on the organisms. The uses and misuses of water are explored. The soil and the air are studied in turn and in the same detailed fashion. Then, at the end of the course, armed with this knowledge, the student returns to the original areas for a second round of field surveys. Things are then put back into their proper perspective. The student is expected to be able to make a wide range of predictions about the area--from how succession will eventually change it to how increased human activities will change it.

- Study of an entire river (The Sandy River) from its headwaters to its mouth. The areas which are specifically surveyed include the headwaters region which is fairly primitive and contains virgin stands of timber, the middle Sandy which includes the only dam on the river, and the mouth of the Sandy which has been measurably changed by human activities.
- Team teaching by a biologist and chemist. This, of course, is not an original technique, except when one considers this as a method of teaching ecology. Used here, it places equal emphasis on living and nonliving components of the ecosystem. It helps instill in the student the knowledge that organisms are really as much interrelated to their nonliving environment as to one another.
- Self tests and attitude evaluating tests for the students' personal evaluation of behavior change. At the beginning of the course, the student is asked, for example: Is Man really nature's most dangerous animal? Explain why or why not. Then, again, at the end of the year, the student is asked the same question.

Gresham High School has developed a unique and effective approach to environmental study which is easily adaptable to small schools and to classes of varying intellectual levels and capabilities.

---

MATHEMATICS/SCIENCE/BUSINESS MINI-COURSE

Use of Computers in High Schools  
And How A Small School Can Get Started

James Norton, Multnomah County IED  
Judy Edwards, Northwest Regional Laboratory  
William Petersen, McMinnville High School

The use of computers in the K-12 curriculum has grown in Oregon in the past five years. Over 80 high schools, and at least 3 junior high schools, were so involved in the 1970-71 school year. It is projected that over 100 high schools, 6 junior high schools, and 10 elementary schools will be using computers in instruction in 1971-72.

Instructional use of the computer is broadly defined as any direct student-computer interaction. This covers computer science (studying the computer itself and programming), computer problem solving (learning to program the computer to solve problems in any curriculum area at any level of ability, roughly grades 7-12), computer assisted instruction (using the computer as a teaching machine and simulation device).

Curriculum materials are now available for the use of the computer in mathematics, science, business education, social studies, English, and Arithmetic Drill CAI, grades 1-6.

Most small schools are unable to participate in computer time-sharing as metropolitan schools do because of telephone charges. Hence the best route for a small school is to lease a 4K or 8K mini-computer or programmable calculator. There are many makes and models of these computers, ranging in price from \$4,000 to \$7,000, which are available for lease at \$200 per month or less. Several schools in a geographic area could go together and share a small computer and its cost.

[A student paper "An Introduction to Basic Data Processing" is carried in Part 3 of this report.]

## HOME ECONOMICS MINI-COURSE

### Innovations in Home Economics

Mary Jane Grieve, Oregon State University

What's new in home economics? For one thing the name. At the secondary level it's now called "Consumer and Homemaking Education." Secondly, there is a return to Career or Occupational Education. Although Food Services is the only cluster identified that is directly connected with Consumer and Homemaking Education, Child Care Services programs are also being established. Food Education and Service Training (FEAST) is gaining momentum in Oregon also. Next year there will be five FEAST schools as well as 15-20 Food Services programs in Oregon.

Individualized instruction is a phrase one hears frequently. The Rockefeller report on education The Pursuit of Excellence points out, "By insisting that equality means an exact exposure to education regardless of the variations in interest and capacity of the student, we are inflicting a subtle, but a very serious form of inequality upon our young people." Jones in his book Principles of Guidance points out that "in most schools education is sacrificed to teaching." Whereas this does yield a smooth operational plan it rarely yields the creativity upon which our way of life depends. Our schools have made far more progress in identifying all levels of talents than in the development of programs for these different levels. This can be proved by the many statistics we can obtain from a student's personal file in the office, yet he has relatively few choices for course selection.

What steps are being taken to help individualize instruction in Consumer and Homemaking Education? One is programmed learnings. These are available commercially or can be teacher made. Couldn't a creative teacher help/let her students develop some of these?

Another is the learning packages which are becoming so popular. In Consumer and Homemaking Education these include HELPS<sup>1</sup> HEEPS<sup>2</sup> and LAPS<sup>3</sup>. These also can be teacher developed.

---

<sup>1</sup> HELPS. (Home Economics Learning Packages), American Home Economics Association

<sup>2</sup> HEEPS. (Home Economics Education Packages), Home Economics Education Association, National Education Association

<sup>3</sup> LAPS. (Learning Activity Packages), Hughson High School Hughson, California

The mini-course which can be one day to several weeks in length is gaining popularity in schools. In home economics, needle crafts, weaving, batik, macrame, gourmet cooking, foreign foods, sewing with knits are just a few of the many possibilities.

In planning your Consumer and Homemaking program, I challenge you to know your students--not just their names, but their interests, desires, capabilities and level of development--so that you can choose the method and media of instruction that will promote maximum development of each individual in your classroom.

---

#### ART MINI-COURSE

##### Newer Media In Art Education

Dr. Kenneth Yost, Oregon College of Education

We had an extremely active session, and the participants appeared to be highly motivated and to engage with great zeal in the activity. Although I showed an array of multi-media kits in various subjects at the opening of our session, the whole program was a "hands on" type of program, and there was much production. Keying the various activities to the grade level and assignment of the various participants, we emphasized making things that would be totally usable in their following program, and each person produced various items which they took with them back to their job. Because we worked in the admirable facilities of the room that was provided, there was quite a "family" feeling developed and I was certainly heartened by the nature of the activity.

In addition to viewing multi-media kits in various subject areas, we produced texture studies; two-by-two slides of silhouettes and visual textures; overhead transparencies of both flat patterns and manipulative devices; posters and shorts; layout and cut letter designs for graphics; direct drawing and painting techniques. We also used film and dyes.

A particularly interesting activity was the making of a pin-hole camera by each member of the group. Using the standard instamatic cartridge which is available in any drug store or grocery store, we created a device which would permit a child,

say from fifth grade on through junior high and high school, to build his own basic camera. The intent here was that a learner could become impressed with the basic phenomena of picture taking. This provides a convenient basic activity in picture making which could go on into various levels of camera club activities.

A great "esprit de corps" developed because we were able to carry on a running commentary as we participated in these activities. Each person did a certain amount of communicating with his elbows, because we shared the immediacy of our creations.

[This mini-course resulted in several papers by participants. One by Loraine DeRosso entitled "Newer Media in Art Education" appears in Part 3 of this report.]

---

#### BUSINESS MINI-COURSE

##### Three-Hour Block Schedule For Office Occupations

Mary Ann Sloan, Toledo High School

The Toledo Vocational Office Occupations Program is designed to train high school students so that upon graduation they will be prepared for beginning positions in the office occupations field. Students enter the program as juniors and continue it through their senior year. It is scheduled for a three-hour period of time each day, and the students receive three units of credit per year. For the other half of each school day, the students attend the regular high school courses; they complete all state and county requirements for high school graduation within the normally prescribed time.

In the vocational office laboratory, each student has his own completely equipped L-shaped business desk. All textbooks, workbooks, and practice sets are furnished for his use. Also in the laboratory is a room library of reference books, pamphlets and periodicals, and a wide variety of shorthand dictation practice records and tapes for student use. There is a wide variety of business machines available for student training and use. These include an electronic calculator and a time-sharing terminal for an introductory course in computer programming.

In operation, there is no set schedule for each day of the block program. Not every subject area is touched each day--students may have assignments in five or six subject areas in a

one-semester, three-period block of time. There will be some formal presentations of new material, some group work, some individual study and work time, guest speakers, field trips, films, etc. Students are encouraged whenever possible to work at their own rate and to investigate areas of special interest to them.

In the junior year, the students form a class corporation. During the two years of the program, they act as the board of directors of this corporation electing its officers, planning its policies and projects, and managing its affairs. At the end of the senior year, the corporation is dissolved, its assets are converted into cash, and the stockholders receive their individual shares of the corporation holdings. The class of '71 paid each stockholder 92 cents for each 25 cents invested--not all of the corporations have done this well, however!

During the last semester of the senior year, each student prepares an extensive project on himself. Data sheets and resumes are part of this, but much other personal information is included for the student's own benefit. Students are asked to research job interview techniques, sources of job information, and common employment tests and to go through an actual interview. A one-week exploratory work experience program is a part of each student's assignment. He reports to a local business for half a day every day for a week instead of reporting to the vocational laboratory. This is one of the most valuable experiences in their senior year for most of the students. Both federal and state civil service tests are administered to the seniors. The job offers and ratings from these tests are very important.

The material covered in the vocational office occupations program does not follow strict course lines, but a listing of common business courses which are combined in the program might be helpful. Insofar as possible, the material from these courses is not duplicated--if an area is covered in several different textbooks, all of the material in that area will be covered in one unit. This is a great time-saving advantage of a block-scheduled program.

Following is a listing of courses:

Business Principles and Management . . . 1 semester

Shorthand (students may elect not to . . . 4 semesters  
take shorthand after the available  
first year)

Typewriting (one year prerequisite) . . . 4 semesters

Bookkeeping . . . . . 2 semesters  
(Advanced bookkeeping available for individual  
students upon request)

Office Machines . . . . . 1 1/2 semesters

Business Arithmetic . . . . . 1 semester

Introduction to Computer Programming . . . 1 semester

Business Letter Writing . . . . . 1 semester

Spelling . . . . . 1 semester

Office Practice . . . . . 2 semesters

Includes: Filing  
Business Psychology  
Income Tax  
Reference Assignment  
Telephone Procedures  
Civil Service Preparation  
Job Application  
Receptionist Duties

This is an exciting, challenging teaching assignment. The content changes from year to year and the situations, from day to day. If you are interested in seeing it in operation, we would be happy to have you visit Toledo High School.

\* \* \* \* \*

#### Office Simulation

Wanda Smith, Sunset High School, Beaverton

The office simulation session covered the concept of simulating actual office techniques in a high school classroom. It focused upon the current program at Sunset High School in Beaverton, Oregon, which makes use of the automobile insurance material available from the Washington Insurance Council. However, other methods or techniques for simulating an office setting were discussed.

A slide presentation gave insight into the actual curriculum development of the program, layout of facilities and rooms, equipment used and the rotation schedule for these, formation of an automobile insurance company, formation of agencies, actual operation of the company and interaction with agencies, explanation of positions in the company and progression through it, evaluation of the students and program, and interest shown throughout the community.

Curriculum implementations were discussed. Emphasis was placed upon the program outline included in the material distributed to the participants. This gave the procedures to follow for setting up a program of this type. The training plan explained the basic procedures followed and how to put the plans into operation. A detailed course outline gave the units to cover and the amount of time to spend on each.

Source material for advanced classes of this kind were discussed with emphasis upon the teacher making use of these and also resource people. Current programs now in operation in office simulation were brought out. The following list was distributed giving the present published materials available to teachers interested in simulating an office.

Block Time--Simulation: Individualized Office Instructional System. Research and Development Program in Vocational-Technical Education. Department of Secondary Education and Curriculum, Michigan State University. July 1969.  
Cost: approximately \$20.

- Vol. 1: Guide to Organizing and Operating the Block Time Simulation Program
- Vol. 2: Teacher's Manual and Curriculum Guide for the Block Time Simulation Program
- Vol. 3: Integrated Projects and Supplementary Materials for the Block Time Simulation Program
- Vol. 4: An Office Simulation--Teacher and Student Kit for the Block Time Simulation Program
- Vol. 5: 100 Case Problems for the Block Time Simulation Program

Hanson, Garth A. Practicum for Simulated Methods in Office Occupation Education. Final Report. Bureau of Research, Office of Education, Washington, D.C., June 1969.  
(ED 034 047) Cost: \$5.10 for hard copy; microfilm available.

Krawtiz. Lester Hill Office Simulation. Gregg Division, McGraw-Hill Publishing Company, 1971. In press.

Washington Insurance Council, 1218 Third Avenue, Seattle, Washington. Cost of materials: free.

Simulated Automobile Insurance Forms and Rating Manuals  
Simulated Life Insurance Forms and Manuals  
Simulated Homeowners Manuals--in press

[A limited number of the materials distributed at this presentation are available from the consultant on request. Visitations to Wanda Smith's classes at Sunset High School are welcomed if arranged in advance. Write her at Sunset High School, Murray and Cornell Road, Beaverton 97005.]

---

#### PHYSICAL EDUCATION/HEALTH MINI-COURSE

##### Contract Teaching and Learning

Robert Sauter, Lost River High School, Merrill

Man has long known that ideally each teacher should have but one student at any one time, but the practicality of this has always been doubted.

The greatest single impact on American education came in this century with the advent of compulsory education for both sexes. Suddenly a nation was faced with the herculean task of providing equal educational opportunities to thousands of young people with diverse backgrounds, varied experiences, and a wide range of potential abilities. To further complicate the situation, man's body of knowledge has continued to increase at an ever-accelerated pace.

Many educators immediately realized that past methodologies used in the education of the elite, if applied to the masses, would bring frustration and leave the bright or unchallenged student to an undesirable fate. This, and the subsequent wholesale waste of human resources, brought attempts to teach each child as an individual, not merely as a member of a group. Obviously, the utopian ideal of a one-to-one teacher-student ratio could not be adopted, but it could be adapted.

Contract learning and teaching is one of these attempts. Specifically, a contract, as an instrument of instruction, is an instructional package which covers a limited and defined area of learning. Each contract consists of three elements: a specific instructional objective stated in terms of student performance, a sample test item for measuring accomplishment of the objective, and several possible instructional procedures of which one or more may be assigned to an individual learner to help him achieve the desired objective.

Application of contract teaching and learning to any or every aspect of the curriculum, whether physical education or mathematics, will demonstrate that--

- Contract learning permits the student to proceed at his own rate of learning consistent with his interests and abilities. This ultimately permits implementation of the continuous progress concept, nongrading, etc.
- Contract learning permits each student to be evaluated according to his own potential.
- Contract learning permits each student to pursue areas of difficulty as well as areas of interest.
- Contract learning is consistent with student individual differences.
- Contract learning places more responsibility for actual learning upon the student. This results from the fact that each student receives the contract and may complete it just as rapidly as he can; he simply follows the instructional procedures which are part of every contract.
- Contract learning increases student proficiency through increased student motivation.
- Contract teaching exhibits and demands more teacher creativity. This will result when a student has difficulty reaching stated objectives, and instructional procedures need revision to make attainment of the objectives possible.
- Contract teaching allows more tutorial time per student.
- Contract teaching increases teacher willingness to exert more effort toward improvement of the school's curriculum.
- Contract learning and teaching make teacher-parent conferences more meaningful through the teacher's ability to better identify areas of student difficulty.

Contract learning and teaching is a type of individualized instruction permitting the teacher, within the framework of a traditionally or flexibly scheduled school, to respond to student individual differences. It does not represent a change for the sake of innovation, but rather an honest attempt to deal realistically with the knowledge explosion as well as the desire for increased student achievement. Applied to physical education, it introduces an element of specificity and concrete direction in terms of observable outcomes. In addition, it represents a challenge for "nothing ventured, is nothing gained."

## MUSIC MINI-COURSE

### Instruments In The Elementary Classroom

Monroe Richardson, Oregon City Schools

In the session on "Instruments in the Elementary Classroom" an overview of student use of instruments was presented as follows: (1) piano--chording with I, IV, V7 and simple melodic extracts from songs to be discovered and performed by children; (2) melodica--a description of the Newberg program; (3) autoharp/resonator bells/guitar--a review of technique and chording; (4) electric piano/organ labs--a discussion of requirements, expense and value; (5) Orff instruments--a description; (6) traditional small rhythm instruments--a display and use of commercial and pupil/teacher constructed instruments.

After this overview, a program utilizing soprano recorders was described and the teachers learned to play pieces in the keys of C, G and F. In this program, the recorder is taught to all fourth-grade students as a part of the general music program purely for the musical experience and to develop music reading ability. Obviously, the instruction also serves as pre-instrument training, but this is not a primary purpose. Solo and ensemble playing continues in the fifth and sixth grades.

In contrast to an electric piano lab costing \$7,500 for six units and console, or supplying melodicas which list at \$54 each, soprano recorders may be provided for each child at a price well below \$2 each for very adequate plastic models. It was found that although the instruments are furnished by the school district, most students purchased their own. Each was labeled with the child's name when first issued. School owned recorders are easily sterilized at the end of the year with a mouthpiece spray supplied in aerosol cans.

The recorder is an instrument which dates back to the primitive fipple-whistle or plug-whistle. In the 1547 inventory of musical instruments belonging to Henry VIII, 77 recorders are listed, consorts of soprano (descant), alto, tenor and bass instruments. The instrument lost out in popularity to the transverse flute in the early eighteenth century because of the greater volume of sound of the flute. It did not regain much use until the early twentieth century when it was reintroduced into English schools. Within the last ten years, its popularity among amateur adults and in schools has spread in our country. In 1965 the New York State Music Educators Association included recorder solo and ensemble music in the graded list.

The recorder is easy to play, has a soft tone, is inexpensive, is a social instrument, requires minimum practice, and is a legitimate musical instrument.

The texts used in the presentation were The First Recorder Book by Marguerite Dubbe, published by Magnamusic Editions (\$1.25) and Melody Makers by Golding and Landers, published by Carl Van Roy Company (\$1.). These texts clearly present correct holding, fingering, and tonguing for the teacher unfamiliar with instruments. Many other recorder texts are available in music stores. After eight to ten weeks of playing, many songs in the keys of C, G and F in the regular singing text may be played with some of the class singing.

The session concluded with a discussion of home made instruments. Each teacher in the class made a drum using inner tubing, a No. 10 can, and nylon string. The following instructions for making instruments were distributed.

#### Making Your Own Instruments

DRUMS: Cut a circle of clarified rawhide (available in hobby shops as lampshade material) 2 inches larger than the top of a flower pot. With an awl, punch holes about 3/4 of an inch in from the rim of the rawhide and about 2 inches apart. Then soak the rawhide in cold water for an hour. You will need about 6 yards of strong twine or drapery cord for lacing a pot 4 1/2 inches high. A drop of glue on the cord ends will keep them from unraveling as you lace. Tie a circle of twine to fit the bottom of the flower pot; then lace in and out through the holes in the drumhead, carrying the cord through the circle of twine on the bottom of the flower pot between each pair of holes. Tie the cord ends loosely together and tighten each stitch all the way around the pot. Don't strain to pull the cords extra tight; the drumhead will shrink as it dries. (Two rows of cord may be laced between drumhead and flowerpot bottom.)

Besides clarified rawhide you may use animal skins or parchment. Music stores often have broken drumheads of calf or goatskin. Heavy parchment is available at an art supply or stationery store.

Large drums can be made from wooden kegs or barrels. Use inner tubes for heads--real rubber, not synthetic, not too heavy, and stretched tightly over the top of the keg. Fasten down the drum head with one of the metal rims, tightly stretched twine, or heavy cord. After sanding, the drums can be painted.

No. 10 cans make an excellent drum; or use coffee cans or oatmeal boxes. The plastic lid on an empty coffee can provides a ready made drum of sorts.

BONGOS: Tie 2 cans of different sizes together. Tie a circle of wet parchment tightly over the open end of each can. As it dries, the parchment will take the shape of the can. Replace the cord with a heavy rubber band.

MARACAS: Slice off the top of a round gourd, clean it out, and put in a handful of dried beans. Make holes in the top and bottom for a piece of half-inch doweling, and glue the top back on. Stick the doweling through the holes and glue a small peg through the dowel above and below the gourd. Another way to make a gourd rattle is to put a round gourd at each end of a piece of doweling, like a dumbbell; you get twice as much sound but use only one hand. The gourds may be painted and then shellacked.

A large light bulb covered with papier-mache and then broken with a sharp tap after the mache dries will create a maraca. It can be painted when dry.

RHYTHM STICKS: The best results are from pieces of hardwood about one foot in length and of small diameter--1/2 inch doweling. For a guiro effect, make a row of shallow saw cuts across the face of one of the sticks; file the cuts. Play the rhythm sticks by stroking the smooth stick over the notched stick.

GONGS: Aluminum frying pans or discarded brake drums are excellent. The brake drum may be suspended by attaching a heavy leather handle--looped through holes in edge.

MUSICAL BOTTLES: Medicine bottles, with screw-on tops, can be tuned to the notes of the scale by putting water in them. Water glasses can also be tuned. Strike glasses with spoons.

TRIANGLE: Large nails struck with another piece of metal will serve as a triangle.

RATTLES: After sawing off the pointed end, fill a gourd with pebbles, beans, or corn. Put a cork in the open end. Baking powder cans can also be used.

CYMBALS: Use old pot lids with handles.

METALLOPHONE: A tuned row of mounted metal tubes can be used as a metallophone. The "bars" or tubes are 3/4" steel electrical conduits sold at hardware and electrical stores. The tubes lie on two 1" x 2" strips of polyurethane foam glued to a 1/4" or 1/8" plywood base. The polyurethane should be soft foam so the tubes can vibrate easily when struck. Use a sharp knife to cut notches in both strips about 1 3/4" apart to position and hold the tubes.

The tone of each tube depends on its length and on the particular piece of electrical conduit because conduit varies somewhat in thickness. So tuning is a matter of experimentation--by cutting and filing or grinding down the length when necessary to secure a tuned scale. A "C" requires a tube about 11" or 12" long (this may vary considerably). The tubes increase about 3/4" in length down the scale.

\* \* \* \* \*

#### Manhattanville Music Curriculum Project Review

Dr. John McManus, University of Oregon

The Manhattanville Music Curriculum Program (MMCP) is an experimental program supported by the U. S. Office of Education. In the four years of its existence (1966-1970), the program devised a philosophy of teaching and a way of learning that involved the student as a composer, performer, conductor, and evaluator.

The curriculum was not developed as a methodology applicable at a particular grade level or for one type of class structure. It is rather intended to serve as an outline of educational activities based on principles which are apropos for all students at all levels of learning. These principles encompass:

- Learning the basic concepts of music through a composition approach rather than through the traditional singing approach. This is not to say that singing is not used in the classroom, merely not used to learn concepts.
- Personal discovery through creative exploration.
- Avoidance of fragmentation in considering basic music elements and organizational factors.
- A concise delineation between concepts and skills.
- Allowing the student to operate as a twentieth century individual combining sounds in an organizational framework that is up to date and not limited to composition practices of 100 or more years ago.
- Problem-solving composition strategies as a way of exploring and learning.
- Personally experiencing the creative thought and process of the composer, the interpretive judgments of the conductor,

the responsiveness and skills demanded of the performer, and the analysis and evaluation of the knowledgeable listener.

- A strong emphasis on the music of today including electronic music, but always related to the music of the past in terms of elements or concepts used.
- A total experience in music encompassing all styles and cultures.
- Learning through a spiral of concepts that allows the student to expand his frame of reference. The musical solutions he employs and the judgments he makes indicates his grasp of relevant concepts.

The role of the teacher becomes that of a guide, a creator of strategies (problems), a resource person, a stimulator for creative thinking, and a strategist in dealing with small groups. His function is to stimulate not dominate.

The curriculum functions best in the elementary and junior high general music program, the high school theory class, and the new music labs that are supplementing the performance classes such as bands, orchestras, and choruses.

The objectives of the program are to develop sensitive people and sensitive musicians, open minds, curiosity, positive attitudes about school music through total involvement and relevancy to real life, skills, concepts of music, and an understanding of music.

The workshop group explored the use of words in several creative settings. Since language arose out of the imitation of the sounds of nature, new words were invented for "raindrop" and placed in an improvised composition. The same was done with the word "bell." The poem "Morning" by Ungaretti was then set to music vocally.

The workshop then explored the use of the Putney Synthesizer, a miniature creative classroom tool that allows a composer to synthesize any sound he desires. The machine is now being used to compose entire film scores, TV commercials, etc.

MMCP materials are now being published by Media Materials Inc., P. O. Box 17, Elnora, New York.

\* \* \* \* \*

### Appropriate Music Selection and Programming

Dr. John McManus, University of Oregon

Since music selection and programming are completely individual matters based on grade level, type of group, ability of group, personality of the director, and needs, desire, and goals of the community and the students, it proved impossible to delve into specific formulas. The workshop group contented itself with a discussion of broad goals, specific resources, and a look at some new materials.

Discussion on goals centered around:

- Balancing the program with thought given toward choosing a broad range of materials that will help the students and the teacher grow in musical understanding.
- Exploring the unusual occasionally with the courage to try new areas of music (electronic tape pieces, swing choir, ethnic music, etc.). Develop curiosity and awareness in students.
- Developing a large and useful ensemble library. Declare an ensemble day once a week and break down into small ensembles. There is no need for groups to limit themselves to the large massed sound all of the time if facilities permit.
- Creating your own supplementary materials through a curriculum that allows for creativity.

Among materials examined were the following:

- Juilliard Repertory Library. This set of eight vocal books and four instrumental books were designed to provide choice and previously unpublished materials of highest quality for grade six and below. The books are to be used as supplementary material. Each book has a selection of music from Pre-Renaissance to Contemporary. The instrumental books consist primarily of small ensemble materials.
- Educational Music Bureau Basic Library of Original Band Music.
- Bell and Howell (Hal Leonard) set of cassettes for individual home instruction on any band instrument.
- German song books and canons.
- Instrumental duets as an ideal place to start a workable ensemble program.

## BEHAVIORAL OBJECTIVES: ELEMENTARY SCHOOL SOCIAL STUDIES

Mont W. Smith, Monroe Elementary School

[The following material is an excerpt from Mr. Smith's paper by this title in which he also discussed the concept of and needs for behavioral objectives. He also presented the possibilities for an application of the concept to a sixth-grade American history unit.]

### II. Component Parts of Behavioral Objectives

In the writing of behavioral objectives, understanding can be aided by breaking them into their several parts. Any requirement has specifics, identities, limits, quality standards, and so forth. So also, good statements of behavioral objectives will have certain necessary parts.

#### A. Use of precision verbs

When stating what is required, the "very" is all important. Specific and limiting type verbs must be used. For instance, the general type verb "understanding" must not be used. It is too general. The verb "name" the ..., is more precise. The objective "pronounce the following 10 French words correctly" is much better than "know the varieties of French sounds...."

Below is a list of verbs that are general by their nature and are not good for use in writing behavioral objectives:

alter	cooperate
know	guide
appreciate	enjoy
communicate	believe
summarize	understand
praise	answer

Below are verbs that are more specific and desirable when writing behavioral objectives. Even these are subject to greater precision as specific needs arise.

thread	specify
strum	dance
list in order	end
write	bisect
diagram	classify
assemble	specify

## B. The inclusive statement

Statements must be used that include all the student is to do and exclude all that he is not to do. This in the same statement. Following are some aids to the writing of helpful objectives. All good statements ought to have the following:

### 1. What exactly is the student to do?

This is where the use of accurate verbs and adjectives is vital. If the student is to list, name in order, simply attempt, or just think about, then just exactly what he is to do must be spelled out in short and clear instruction.

### 2. How much is the student to do?

The instruction to give "several" examples is less superior to, "give four examples of." If the student must know "the major rivers" then there is room for argument. If, however, he must know the three longest rivers, or the four rivers having the largest annual volume of water, or the three that have the possibility of travel by ocean-going craft, then he knows what is important and what to remember and has a point of reference as to what is important.

### 3. With what accuracy shall the student perform?

If the student must type 50 words a minute with 75 percent accuracy, then this is one thing, and it sets forth a value judgment by implication. If the requirement is "with 95 percent accuracy" then this is quite another thing. It is very helpful in studying to know just what is very important and what is subject to recognition only instead of absolute recall.

"List in order of size the major nations of Europe" is less helpful than "list in order of size the six major nations of Europe with 100 percent accuracy."

### 4. Under what conditions shall the activity be done?

Statements that set forth conditions are vital. Some examples are:

"without the aid of any textbook"  
"upon the map provided herein on page three"  
"with a one-foot ruler only"

"in a soundproof room"  
"with a ten power telescope only"  
"under the direct supervision of..."  
"at any public library"  
"at any pool having at least a ten-foot board..."  
"with red marking pencil"

Conditions that are not material should be avoided. All nonmentioned possibilities are presumed as permitted unless specifically excluded by the limiting statements.

The point is to get to the objective and goal of the course of instruction with a minimum of wasted time due to petty administrations and confusions.

#### 5. In what time shall the activity be done?

Questions of time are vital. Some studies have serious relationship to time. The time it takes to finish a task may be directly related to the extent of the learning that has taken place. Setting time requirements may also indicate the value of certain sections of the study to the pupil and thus aid his total understanding of the data. In other cases, time schedules may help move a dallying student on thru the prescription to another step in the learning process.

For example:

"within three days of the outset"  
"in a 30-minute time period"  
"between the hours of noon and midnight"  
"in no more than three hours"  
"in no less than one and no more than three..."

There may be other considerations and modifications to this criterion. In fact, each teacher should attempt to relate the style of his approach to the educational needs of the children and change these as their needs and abilities change.

One last example incorporating all the above matters:  
"The student shall be able to assemble correctly the model clock provided with the test, using all pieces provided, without the use of any aid or diagram, within a thirty-minute period of time, and in the presence of an authorized judge."

### C. Pretesting and post-testing

Testing must be a learning device as well as a measuring device. What is included on a test is directly related to the value of its parts and to the discipline as a whole. Thus, in a pretest, not only is the student exposed to an example of what can be expected on the "final," but he is also appraised as to the relative values set upon certain learning by the testor. Of course, the test is to determine what remedy is needed for the student and what instruction or activity he needs and doesn't need.

The test, when administered after a thorough examination of the behavioral objectives, will give the student a motivation and a self-knowledge which ought to be a positive aspect of his total readiness. He will know where he stands, how he is viewed by his teacher, where he ranks in relationship to expectations (and by implication where he ranks as against his peers in knowledge), and how much effort he must plan to put forth in order to achieve what he expects to do.

Therefore behavioral objectives are seriously related to testing, especially so when the testing is involved in some kind of progressive individualized form of self teaching, and the following-through on prescriptions adjudged by pretesting and post-testing procedures.

---

### STARTING A MEDIA CENTER IN A SMALL SCHOOL

Robert W. Murphy, Culver High School

. . . How would a small school go about achieving an up-to-date media center? There are certain considerations to keep in mind when a school district begins bringing materials together: (1) How will new equipment be purchased to supplement the existing audio-visual equipment and materials that are found in a small school? (2) What types of equipment and materials construct a full media curriculum that will be useful to the students and teachers? (3) What orientation is required to acquaint the teachers and students of the school with the operation of new equipment?

These are some of the questions that have to be answered before starting a full media program. Media and equipment does not need to be expensive. Funds are available through various ESEA funds known as Title II and Title III which are federal funds directed to the improvement of education in this country. With such funds and good planning, long range programs with definite yearly goals can be initiated. Before a program can be initiated, rough written drafts should be given to each teacher for review and comments aimed at refining the media center to the best advantage of the whole school. With careful groundwork and with everyone involved to some degree, the program can become a great success.

However, the amount of enthusiasm should not let the program run rampant and overspend a district's budget. A good way to start a program is by thinking small. How small? How many of one type of media and equipment is needed? Unfortunately, there is no easy answer to these questions. The best guidelines are those that are set by the curriculum and funds on hand, working from a base amount of so many dollars per student. With this amount in mind, one could choose to start with filmstrips, both free and purchased, and necessary viewing equipment sufficient for a wide distribution throughout the district or complex of buildings. In following years one would reinforce the filmstrips with slides, tapes, or films depending on what the school district could afford. In the future, other areas of media such as overhead projection equipment or a sealamin press for laminating could be added to expand the media center. Over several years, progress would be made, even with limited funds, toward developing a media center.

A list of basic equipment, materials and personnel needed for a media center is given below. A school district would use this list as a guide for deletions or additions as the center is developed.

#### A CHECKLIST OF EQUIPMENT AND MATERIALS FOR A MEDIA PROGRAM\*

<u>Equipment</u>	<u>Instructional Materials</u>
Graphics	Films
Thermal copier--transparencies, both color and black and white, ditto masters	16 mm 8 mm Filmstrips

\* Tanzman, Jack and Kenneth J. Dunn. Using Instructional Media Effectively. Parker Publishing Company, Inc., 1971, New York. p. 122.

A Checklist of Equipment and Materials For A Media Program -  
(Cont'd)

<u>Equipment</u>	<u>Instructional Materials</u>
Dry mount press--laminating color lifting, dry mounting	Sound filmstrips Tapes Cassettes
Photography equipment and supplies	Records Transparencies Flat pictures
<u>Audiovisual</u>	<u>Supplies</u>
16mm projector 8mm loop projector Super 8mm loop projector Filmstrip projector Record player Tape player Cassette player Slide projector	Graphics Administrative Miscellaneous
<u>Staff (Ideal Team)</u>	
	Graphics technician Secretary Librarian or media specialist
<u>Storage</u>	
Filmstrip cabinets 8mm cartridge cabinets Tape cabinets Film shelving and racks Miscellaneous storage (sound filmstrip sets) Transparency and picture files	

Through specially planned workshops, teachers' meetings, and classroom sessions, teachers and students would be instructed in the use of the materials and equipment by a media specialist or librarian. In a small school the librarian would also be the media specialist. The librarian would receive instruction in the use of equipment through college courses, workshops and jobbers representing the companies. The librarian would organize the media center and be in charge of dispensing materials to teachers and students.

Small mini courses, dyad groups, and explanatory notes and charts would be offered as the need arose during the school year to acquaint students and teachers with new materials. They in turn would pass the word along to others.

It is realized that this is not a complete, inflexible program. But, it is one that would start a small school in a media program.

---

### THE COMMUNITY AS A CLASSROOM

Marcia Skinner, Lowell High School

Ideas derived from group activities undertaken in the Small Schools Institute are used in this paper to develop methods and strategies for getting English students out into the community as a learning experience this fall. This student-community effort will probably be entitled "Lowell as My Great-Great Grandparents Saw It." Hopefully, if all goes as planned, this unit will be expanded to include the present and a projection into the future as it relates to the student.

The overall purpose of this historical project is to bring about better understanding and empathy between the school and the community. Other benefits may very well be such things as student appreciation of his heritage, better understanding of his community and its people, and pride in his ability to contribute to a group effort.

GENERAL COURSE CONTENT: Student Survey and Community Research Project

SUBJECT: English--Nongraded Juniors and Seniors

MAJOR CONCEPT: To gather, compile, and report on findings

OBJECTIVES:

1. Students will conduct research into the community's past.
2. Students will gather information passed from one generation to the next. The information they are to gather will no doubt vary greatly. Some things they may search out are: recipes, tall tales, local myths and legends, jokes, logger language and terminology, fishing and hunting language and terminology, place names, historical fact and fiction, history of the pioneer graveyard, student's choice.
3. Map research, and mapping of historical routes, roads, bridges, landmarks, etc.

4. Students will compile findings.
5. Students will give oral and written reports of their findings.

LEARNING ACTIVITIES:

1. Introduction to American mythology and folklore.\*
2. Group planning.
3. Search for information.
4. Group and individual reports on initial findings. Plans may need revision at this point.
5. Back to the community search.
6. Field trips:
  - a. Historical museums
  - b. University of Oregon Library and Eugene Library
  - c. University of Oregon Archives
  - d. Pioneer graveyards (Eugene and Lowell)
  - e. Open
7. Final compilation of findings.

RESOURCES:

1. Lane County Historical Society
2. Oregon Historical Society
3. University of Oregon Archives
4. Doctor Toelkin, University of Oregon
5. University of Oregon Library and Eugene Library
6. Forest Service
7. Open

MEASURABLE LEARNINGS:

1. Oral and written reports of individual and group findings.
2. Proficiency in using tape recorder.
3. Proficiency in note taking.

---

\* Brunvand, Jan Harold. The Study of American Folklore. (an introduction)

## HOW I WILL IMPLEMENT THE STRATEGY "THE COMMUNITY AS A CLASSROOM"

John Haller, Mohawk High School, Marcola

PURPOSE--High school students are at an age when they are interested in the basic question, "Who am I?" One way for them to get a perspective on this question is to look at other people to see who they are. Everyone, either intentionally or unintentionally, makes judgments about other people; and everyone is judged by others. If we study the kinds of impressions others make on us, we can eventually begin to see the kinds of impressions we make on others. That is, we can begin to see the person we project to the world. Thus, the purpose of this strategy is, first, to make students aware of the ways in which they make judgments of others, and later, to help students see how they project their personalities to others.

I also see the activities involved in this strategy as useful in beginning several other possible units of study in the areas of drama, character analysis in literature, and speech. For offshoots of this strategy see the "Quest" section.

OBJECTIVES--The following objectives are stated in terms of what the student must do to complete the exercises.

Exercise I. After observing, without speaking to, five previously unknown people chosen at random, the student must be able to do the following:

1. Write what he observed.
2. Make a list of factual information observed, and a list of judgments made from these observations.
3. Make a list of nonverbal clues that caused him to form his judgments.
4. Discuss his observations in a small group.
5. Summarize orally for the group the major clues he looked at when observing others.
6. Ask the group members if they detect any other clues that he tends to observe in others.
7. List the ways he thinks he should change his method of judging others.

Exercise II. After observing five previously unknown people (different from Exercise I) chosen at random, and after talking to each of the five, the student must be able to do the following:

1. Write what he observed before he spoke to each person (use steps No. 1-3 from Exercise I).

2. Write what he observed after he spoke to each person.
3. Explain in writing how his evaluation of each person changed after speaking to him.
4. Estimate the percentage of his evaluation that was based on verbal and the percentage based on nonverbal clues.
5. Discuss his observations in a small group (use steps No. 4-6 from Exercise I).
6. Summarize in writing the major verbal and nonverbal clues he looks for when making judgments about others.

Exercise III. After completing Exercises I and II, the student must be able to do the following:

1. Write a character sketch of himself.
2. List the five most important verb 1 and the five most important nonverbal clues which he thinks he uses in projecting his "personality" to others.
3. Ask a member of his group to write a character sketch of him.
4. Ask that person to list the five most important verbal and the five most important nonverbal clues he used in writing the character sketch of him.
5. Write a comparison of the sketches and lists. Does he see him as he sees himself?
6. In his small groups, discuss both lists of clues. For those clues on which he did not agree, decide which are the ones he wants to project, and explain what he could do to change his projection to match his "self concept."

**IMPLEMENTATION**--To accomplish the twofold purpose of making students aware of the way in which they judge others, and of making them aware of the ways they project their own personalities, I have divided the strategy into three exercises. Exercise I intends to make the student aware of the nonverbal clues we all use in making judgments about others, and of course, they use in judging us. Exercise II should make students aware of verbal clues each of us uses in judging others. Exercise III will turn the coin over to make the students aware of how others see the verbal and nonverbal clues we give out; i.e., how we project our personalities.

I intend to use this strategy in my senior English class. I will divide the class into small groups of four to six people. I will divide the strategy into two parts. First we will do Exercises I and II, then we will do Exercise III. I hope to have the students formulate their own conclusions about how they project themselves (Exercise III) without prejudicing them ahead of time by explaining that we are going to study the basic question, "Who Am I?"

1. I will hand out the objectives for Exercises I and II.
2. We will discuss how we look at and formulate opinions about other people. I will try to bring out the fact that intentionally or unintentionally we all observe and make judgments about the people we meet.
3. This will lead to a discussion of the kinds of clues, verbal and nonverbal, that tell us things about people. Here I hope to bring out the kinds of nonverbal clues such as dress, physical appearance, walk, expression, etc., and the kinds of verbal clues such as voice tone, volume, accent, vocabulary, etc. we use in forming our judgments. At the same time, I do not want to go into so much detail that the students become "programmed" as to what to look for in the people they observe. This should be as spontaneous as possible.
4. After these preliminaries and student questions are taken care of, several days will be allowed for the completion of Exercise I.
5. After Exercise I is completed, a more comprehensive discussion of nonverbal clues to personality will be held.
6. Time will be allowed for Exercise II.
7. After Exercise II is completed, we will have a general discussion of the ways we receive both verbal and nonverbal clues about people and the ways we use those clues to make judgments.
8. Finally, I will hand out the objectives for Exercise III and ask the students to use the experience they have gained in observing and judging others to see if they can discover the ways they project themselves to others. Here I hope to get them to see who they are in the eyes of their peers, as well as in their own eyes.

It should be noted that at no time have we touched upon the correctness or incorrectness of the judgments made. The purpose has been to make students aware that judgments, whether right or wrong, are made. It is hoped that the students will at least gain some maturity in making those judgments.

QUESTS--While the main purpose of this unit has been self-analysis, it very readily leads into areas of role-playing in drama, character study in literature, and projection in speech.

Using the techniques learned, the student could follow up in these areas by:

1. Drama: Seek to discover the clues to a character from the lines spoken by him and about him, and from the stage directions. Then attempt to use these clues in projecting that character.

2. Character Study: Using a short story or novel, attempt to discover how the author creates a character. What clues does he give us? How does he project the character? This might be done with several students using the same character to see if they all reach the same conclusions.
3. Speech: The student should now be aware of the ways he projects himself to his audience. Using different kinds of speeches such as humorous, informative, and persuasive the student might attempt to change his "projection" to fit the speech and an audience situation "given" by the instructor.

These are three of many ways a student might use this strategy as a springboard to other learning experiences.

---

#### AN INTRODUCTION TO BASIC DATA PROCESSING

Bernice Y. Payne, Dayton High School

We are living in a changing world that demands that teachers be aware of what the students will have to face in their after high school world of work. Data processing is playing an important role in the fields of mathematics, accounting, management, marketing, and medical-atomic-aerospace research. At present, it is probable that almost one half of all of the paper work is done by some type of automated system. Therefore, it is important that we give our high school students some background knowledge in the area of data processing. Since World War II, data processing has developed by leaps and bounds.

Many schools do not have the equipment, since it is very expensive, but by the aid of simulators, typewriters, adding machines, and calculators, all business students and others can become acquainted with the latest trends in automation. There is an excellent opportunity for career guidance in this new (or old) area of data processing.

In planning a course to introduce the students to the subject of data processing, the following goals should be kept in mind:

1. To satisfy the curiosity of students who want to know how information is processed by electronic computers.
2. To acquaint students with the changes that have taken place in processing data because of electronic computers.

3. To develop, through the unfailing logic required by the computer, experience and skill in analyzing problems and laying out logical, step-by-step solutions.
4. To help prepare students for careers in which they need to understand automated data processing, even though their jobs may not be directly connected with electronic computers.
5. To acquaint students with job openings in data processing and the qualifications needed to fill them.
6. To give students a basic foundation on which they can build in order to prepare themselves for careers in electronic data processing.

In order to orient the students in the subject of data processing, the first few lessons should have the following objectives:

1. The learner will be expected to demonstrate orally his knowledge of the history of computers in a class discussion.
2. The learner will be expected to familiarize himself by doing research at the library, with some conclusions regarding the important role which data processing plays in modern industry.
3. The learner will be expected to interview and write a resume of some of the job openings interesting to him and to list the qualifications needed to fill them.

PREVIOUS HISTORY--The first digital computer was not successfully built until 1944. This model was slow but it did compute correctly, automatically and rapidly for that day.

Before this time, we must do a little searching to see what man did to be able to do computations more quickly. We find that before the nineteenth century most of man's computations were done with his brain. These were done by simple counting using his fingers and, if necessary, even his toes. We find that the early Roman schools actually taught finger counting. A method was devised to multiply and divide on the fingers.

It was soon after the use of the fingers that man started to use material aids such as pebbles and sticks for his mathematical computations. Many of us are familiar with the abacus used in our elementary grades which was really the first counting machine. It was invented 3,000 years ago. It is a simple machine which consists of a frame which has rods strung with beads set side to side. The beads represent digits and rods represent the places--units, tens, hundreds, and higher multiples of ten.

The origin of the abacus is uncertain. Many think that it came from the Hindu civilization while others think that it

came from Babylon or Egypt. There are others who think that it came from the Chinese since they modified the original and adapted it to their use early in their history but, truthfully, it dates back beyond their first use of it.

The Japanese have a similar model of the abacus known as the soroban. These models are amazingly fast if used by skilled hands. The difference in the two models can be easily detected since the Japanese model has only one bead in the upper compartment on each rod while the Chinese model has two beads on each rod.

In Wiltshire, England, North of Salisbury, evidence has been found that, between 1800 and 1400 B.C., early man was keeping a record of the seasons and eclipses of the moon and sun. It was a circular form of stone and pillars circumscribed by an earth-work. This ruin is called Stonehenge. It indicates that man was keeping records and making predictions during the Late Neolithic and Early Bronze ages.

A device using the same principle of analogous comparison as used in an analog computer was invented by Leonardo da Vinci in the late fifteenth century. This device was used for computing distances by dropping pebbles into a box for counting. It was not widely used but still was a step in the history of computers.

John Napier was the father of logarithms. He set up a table of logarithms in 1614, helping the world to simplify computations involving multiplication and division. Later Napier invented a device called "Napier's bones." It consisted of rods of bone on which numbers were printed, and by these computations could be made, even square root and cube root.

At about this time, in 1622, William Oughtred used the slide rule which was an outgrowth of the logarithms. A slide rule consists of two rules fastened together. A slide rule moves either backward or forward until the number coincides with the number of the second rule. At this time an answer can be read from the third scale. The slide rule is widely used by scientists and engineers today. Many calculations involving multiplication, division, powers, roots and proportions can be solved by using the slide rule.

In 1642, Blaise Pascal invented the first mechanical adding machine. Mr. Pascal's machine consisted of cogs and wheels which were numbered. These wheels and cogs could carry tens automatically. This machine was the basis for the adding machines that we enjoy today. Of course, there have been many improvements.

In an attempt to speed up and simplify the accounting of the English currency, Samuel Morland, in 1666, developed an adding machine.

In 1694, Gottfried von Leibnitz drew the plans for a machine that could add, subtract, multiply and divide. These plans were used but, because it was hard to make parts with the high precision that was necessary, the machine was not entirely accurate.

Many attempts were made during the next two hundred years to improve on the calculator that had been invented. In 1820, Charles Xavier Thomas invented a calculator that was the first to add, subtract, multiply, and divide accurately. This machine is actually the ancestor of the present day desk calculator. By 1880, a crude but accurate machine was in use.

These early calculators were all invented by Europeans, but in 1872, Frank S. Baldwin invented the first calculator in the United States. This was the first of a fast growing industry. The first machine to record the figures on paper was invented by Dorr Eugene Felt and William S. Burroughs in the 1890's.

The most common adding-listing machine, the ten-key, was invented by Oscar and David Sundstrand in 1914. Jay R. Monroe and Frank S. Baldwin also invented a calculator that could multiply and divide automatically. This feature brought about a new era in calculators with the words of "speed" and "automatic" as the key.

By the use of punched cards in which to record facts, Herman Hollerith designed an entirely new system of processing data. In 1728, Bouchon and Falcon used punched paper tape and punched cards to control the pattern of a rug weaving machine. This was the first automatic loom which was perfected by Joseph Jacquard in 1801.

Hollerith, in 1880, was employed by the United States Census Bureau to expedite the sorting and tabulating of census data. At first, a paper tape with information in punched code was used which was not very satisfactory. Since the paper was very pliable, the information was transferred to cards which were more durable. Hollerith, in 1887, worked out a system for census information including cards, card punch, a sorting box, and a tabulator equipped with electro-magnetic counters. Eighty cards a minute could be sorted by this process and the data could be tabulated and counted at the rate of fifty to seventy-five cards a minute.

The Hollerith System was used to process the 1890 Census. Using this method, the Census was completed in one-fourth the

time that it took to complete the Census of 1880. Hollerith then organized a company to manufacture and market his system which is now known as the International Business Machines Corporation.

In 1910, James Powers was employed by the United States Census Bureau to improve the system formerly used. He developed a new punching machine, sorter, and tabulator. This machine used the die-set principle whereby all information to be punched on a card was first keyed into the machine correctly. In this way, it was possible to correct a card before it was punched.

Powers also organized a company to make and sell his machines. This company was purchased by the Remington Rand Corporation which is now the Univac Division of the Sperry Rand Corporation.

Many improvements have been made in these machines. Many machines were capable of taking over the record-keeping in businesses. These machines could not only add, subtract, and multiply but could divide. Soon machines were developed that could process alphabetically as well as numerically. The speed and versatility of the machines were increased. By the 1920's and 1930's, the punched card data-processing system was widely adopted by businesses across the United States.

These machines were connected electrically but were operated mechanically. Because of the mechanical aspect, these machines were slow when compared to the modern machines.

In the middle of the nineteenth century, Charles Babbage declared that he would construct a machine that would incorporate a memory unit system, an external memory unit, and conditional transfer. He was an excellent mathematician who spent his life and his fortune as well as money from the British government on the design of an automatic computer.

Babbage believed that he could program his machine by the use of cards so computations could be handled automatically. He did not complete his machine because the proper precision tools were needed to perfect it. Drawings were left that were instrumental in designing and building an automatic, rapid computer in the 1940's.

LATER DEVELOPMENTS--In 1944, Howard Aiken developed an automatic sequence-controlled calculator, the Mark I. The sequence of calculations was controlled automatically by instructions punched into paper tape attached to the computer. While the work of the computer was done automatically, it was slow compared to the ones designed later. Gears, wheels, and electric relays were used to make computations.

John W. Mauchly and Prosper Eckert, in 1946, developed the first truly electronic digital computer. This one had no moving parts other than those used in feeding the data into the computer or recording the data on the punched cards. It was faster because electrical current moves faster than mechanical parts. This was known as the Electronic Numerical Integrator and Computer.

At this time J. von Neumann designed a computer that used the binary arithmetical system to compute calculations internally. This computer was known as the Electronic Discrete Variable Automatic Computer. This is the first computer to store problems. Using a number, each instruction is put into the computer and these can be recalled for future use. Some instructions can be skipped and others can be added. With this capability, the computer may change the flow of its computation as it executes the program.

Since 1946, great strides have been taken in the computer world. It is now possible to be hooked to a central computer that will send the answer back through your teletype and be printed on paper. Others are so connected that information can be printed on cathode-ray tube equipment located in the sender's room. Others will convert programs written in our language to the language of the computer and relay the answer to the problem.

It was in 1954 that electronic computers were used in business for the first time. Because of the necessity of having information immediately, the computer has become very popular. It is by far the most powerful tool to be created by man for processing, storing, and retrieving information. There were no more than fifteen computers in the United States in 1950! Today, there are at least 48,000, and by 1975, it is expected that there will be 85,000 computers with a work force of 3,000,000 engaged in their operation.

JOBS AND CAREERS--A career in the computer world is rapidly growing and is by far the most challenging and rewarding. This industry is moving ahead so fast that it is difficult to find enough qualified young men and women to meet the demand. Salaries offered in this career are the highest to be found in business.

Regardless of educational background, there is a great future for everyone in the electronic computer field. At present and in the future, there will be a demand for craftsmen to construct computers, technicians to install and maintain them, engineers to design new computers, salesmen to sell them, scientists to discover new applications and computer operators to turn raw data into useful information.

### Bibliography

Charp, Sylvia. Computers in General Education. Pennsylvania Department of Education, 1967.

Crowley, Thomas. Understanding Computers. Bell Telephone Laboratories. McGraw-Hill Book Publishing Company, New York, 1967.

Darnowski, Vincent S. Computers--Theory and Uses. National Science Teachers Association, 1964.

Darnowski, Vincent S. A Teacher's Guide to Computers--Theory and Uses. National Science Teachers Association, 1964.

Desmonde, William H. Computers and Their Uses. Prentice-Hall, Inc., 1964.

General Electric Company. You and the Computer. General Electric, 1965.

Gibson, Dr. E. Dana, Hoffman, Dr. Harry, and Kallaus, Dr. Norman F. Data--Communication in Business, An Introduction. American Telephone and Telegraph Company, 1968.

Monograph 92. Visual Aids for Business and Economic Education. South-Western Publishing Company, Cincinnati, 1969.

Oregon State Education Department. A Guide to Office Occupations Education in the Secondary Schools, 1968.

President's Science Advisory Committee. Computer Science. National Association of State Universities and Land-Grant Colleges. 1967.

Randall, Clarence B., and Burgly, Sally Weimer. Systems & Procedures. South-Western Publishing Company, Cincinnati. 1968.

Wanous, S. J., Wanous, E.E., and Wagner, Gerald E. Fundamentals of Data Processing. South-Western Publishing Company, 1971.

---

## NEWER MEDIA IN ART EDUCATION

Lorraine DeRosso, Union High School

The strategy of "Newer Media in Art Education" can be implemented in the art class in several ways. Most learning takes place through the eye-gate, along with sound, touch, smell, and taste. The use of the overhead projector and slide projector in the classroom has not been exploited, especially, in the art class. Why not implement this media for learning and stimulating motivation?

When giving a report, a student could use the overhead projector to illustrate a point by projecting a drawing, a map, a definition, or with a grease pencil write the information then and there without turning his back to his audience, thus retaining eye contact which is so vital to motivation. The process of preparing transparencies to be used in a project ahead of time provides an interesting experience for the student. He also can experiment with his artistic ability. An individual learns much through doing. There is a sense of satisfaction and accomplishment in one's own product.

Transparencies can be used for information, directions on how to assemble or make something, for story telling using silhouettes, to name a few. Record a tape of a fairy tale and make "movable" silhouettes in transparency frames to dramatize the story as it is played. This same device could be employed in a speech class--as one student tells the story another could synchronize the movements of the silhouettes accordingly. There may not be a "silhouette frame" for every part of the story, thus employing another student to turn the projector on and off. Several students in this manner are involved in making the story a success and effective--teamwork. The creative abilities of the students are expressed in making the silhouette frames with one or more parts, a leg, arm, hand, head, tongue, movable to create "live" impressions.

A whole group of stories could be prepared on frames in this manner by art class students and presented to elementary teachers for use in their classrooms. The elementary children could even make their own after seeing a sample or two. A typed script would accompany each story with directions when to use the frame and when to turn the projector off, and so forth.

Instructions in origami could be projected by steps on the screen as well as designs created by the art student through experimentation. Of course one would stay within reasonable costs making only frames or transparencies that would be used again and again.

A series of actions, designs, or picture lifts could be laminated into a long strip, drawn across the overhead projector, and thus shared by all in the room. Any time an art student experimented with a picture lift, he could place it on the overhead to see the result.

Snap-together slide frames could be used to enclose things of different textures, such as feathers, weeds, seeds, to create a design and then be projected on the screen for effect. These designs could be enjoyed or reproduced by drawing them on paper. Since the frame snaps together the student could change the design if it did not suit him or just simply make another. If he wished to file this design, he could use another frame for a new design.

Slides of posture and form in sports could be prepared for physical education classes. Action shots of an important game could be made and shown in a pep assembly or made into photographs to hang in the halls during a particular sports season. These pictures could be put in the school newspaper and yearbook. All this involves photography, but why not have photography in the art classroom. Art is not just drawing. Art is everywhere--from the decorating and arranging of one's living room, to designing a bridge, to the skilled painting of a portrait. Art is human ingenuity, as in adapting natural things to man's use. Art is skill in performance, acquired by experience, study, or observation. What better way is there to develop latent potential or skill in performance than to experiment with the media of the overhead projector, slide projector, and filmstrips through study and observation?

In the field of science, the door stands ajar for students to develop ideas and facts about and pleasure in plants, wildlife, and geology, and to reproduce them for the screen.

In home economics, the overhead, filmstrip, and slide projectors could be used more by the student producing the pictures to be projected on the screen. By using everyday, environmental settings, the study would become more alive and interesting.

Filmstrips can be designed by drawing or painting on film then putting the work in 2" x 2" slide frames and projecting them on the screen. The student could experiment in many ways in this manner to his satisfaction.

There are so many directions one can go in the use of the screen in the classroom, especially in art. Rather than making art projects for the sake of making them, the student, during art class, could be making transparencies and slides of all

descriptions for teachers in various courses, thus creating an integrated classroom-subject atmosphere.

SUBJECT: Art

CONCEPT OR IDEA TO BE LEARNED: To give the student opportunities to creatively experiment with slide, overhead, and filmstrip projectors in art class through the use of frames, transparencies, 2" x 2" slides, picture lifting, and filmstrip material.

OBJECTIVES:

1. The learner will be expected to construct from tag board and overhead transparency supplies, sufficient scenes with movable parts to dramatize one story of his choice using the overhead projector.
2. The student will be expected to gather materials of his choice, varying in texture, for two designs applicable for reproduction, and capable of being put between two glass slides which snap together and can be projected on a screen through use of the slide projector.
3. The student will be expected to "lift" three pictures and/or designs from a magazine and mount them in slide frames and/or overhead transparencies.
4. The learner will be expected to make a series of transparencies giving instructions, step-by-step, on how to fold and cut paper to make anything, such as a star, paper airplane, a letter of the alphabet, which he desires to show.
5. The learner will be expected to make with special marking pens and/or crayons a series of not less than five cartoons, designs, or pictures, with continuity of theme, on filmstrip material to be projected on the screen.

LEARNING ACTIVITIES:

1. Listen to instructor as he demonstrates use of the newer media.
2. Work in groups of two or more or alone to develop a project.
3. In each group, or if working alone, complete a project of his choice for the overhead, slide, and filmstrip projector to be viewed by the other class members and ultimately used by one or more other classes.

POST-TEST: The instructor will evaluate the projects as to usefulness and compliance with objectives.

## IMPLEMENTATION OF THE GATB

Rev. Arthur P. Dernback, St. Mary's High School, Medford

I am a former counselor turned principal who became familiar with the GATB in former days when vocational counselors from the local employment office used to come to the schools and administer the test to selected, non-college bound students. They have since discontinued the practice. I have felt a loss for the students and had wanted to be able to give the exam myself. Training, however, was needed. The two days at the Small Schools Workshop made me "certified" so that in the future I might administer the test myself.

BACKGROUND OF THE TEST--There were many manpower needs to be met during World War II. It was necessary to train men and women quickly and efficiently so that the nation's production could meet rigorous schedules. There were at the time dozens of testing instruments that aimed at measuring this or that aptitude. Some were good, some were bad. But, even if all had been good there were still too many of them since a given prospective worker could not be given some fifteen different tests to screen him for some fifteen different jobs.

Out of all this, there came a recognized need for a single testing instrument that would measure the greatest possible number of aptitudes with at least an accuracy achieved by some of the individual tests. Instead of a single aptitude test battery there was need of a general aptitude test battery that could be so interpreted that a wide variety of results could be extracted therefrom. A norming group was selected, stratified according to job occupations as given in the 1940 census. Geographical considerations were also considered by selecting normees from several divergent areas. The end result was that norms were set, the test refined, and then put into widespread use. After the war, it became the main testing vehicle of the Department of Labor.

NATURE OF THE TEST--Basically, there are nine aptitudes measured by twelve tests. Some are "paper and pencil tests," some are not; those that are not, measure finger and manual dexterity; those that do, are as follows:

1. Name comparison (designed to measure quickness of perception in the area of the printed word)
2. Computation (simple operations with problems already set up)
3. Arithmetic reasoning (the typical "story problem")
4. Vocabulary (picking out alikes and opposites)

- 5. Three dimensional space      )      All these three measure
- 6. Form matching                  )      ability to discriminate
- 7. Tool matching                 )      and to recognize
- 8. Markings (A test to measure ability to work rapidly and  
still reproduce a simple figure in a given  
circumscribed space)
- 9. Place      ) Two tests working with pegs which have to be
- 10. Turn       ) manipulated quickly in moving them and also  
               ) turning them
- 11. Assembling of rivet patterns      ) Tests of finger
- 12. Disassembling of rivet patterns      ) dexterity, whereas  
    ) #s 8 and 9 above  
    ) tested manual dex-  
    ) terity

INTERPRETING OF THE TEST--The tests can be either hand scored or machine scored. The advantage to schools of the machine scoring approach is that a small press-score label is supplied by the company which can be put on the student's permanent record card. Hand scoring, however, is not very time consuming. It takes about ten minutes to correct the various tests and make the proper entries on a 5" x 8" individual aptitude profile card.

Once the profile card has been properly filled in, it is checked against an assortment of various cutoff scores for some sixty-two occupational clusters. Three results are usually checked as a group, though two or more tests might have their results incorporated into a single score. The end result is that a person's basic aptitude or non-aptitude is given for a wide variety of professions or occupations.

No one test gives absolute answers. This is true of the GATB. Counseling must always accompany the making of the profile.

MY USE OF THE TEST IN THE COMING YEAR--I plan to give the test to all seniors early in the year. Most of them have already taken the PSAT, the NMQT and, during the senior year, the SAT. Recently the armed services have been administering the Armed Services Vocational Aptitude Battery to certain area schools. It attempts to do the same as the GATB in a more restrictive way. Much of this test is very much boy-oriented so the value to girls is limited. It does have some value, however, and our students have taken it.

Giving the GATB would take care of both boys and girls on an equal basis. A testing device like this is going to have more and more importance in succeeding years as the State Board of Education's emphasis on the "vocational cluster" approach to the high school and community college curricula gets more attention. Less people will probably be attending a four-year college. Those that head for a particular occupation could be well served by the administration of the GATB.

The local intermediate education district office has the GATB kits on hand. We will have them machine scored at the National Computer Systems in Minneapolis, Minnesota. The price is 27 cents per answer sheet. We will ask a counselor from the Oregon Employment Service to assist us in giving and interpreting the tests. Results will be sent to parents so they will know the test's outcome. We might even invite them for an evening to discuss the test results.

In any event, the GATB test will serve as an added dimension to our counseling program. We are looking forward to its inauguration with us.

---

APPENDIX

Listing of Student Papers

The following categorization of papers submitted for credit by Institute participants is an attempt to group the papers for easy perusal of titles. In some cases, titles could have been listed in several categories; however, each title appears only once. (Titles with an asterisk are carried in Part 3 of this report.)

BEHAVIORAL OBJECTIVES

A Description of the Journalism Class at Vernonia High School Including Behavioral Objectives for the Course, Alvida G. Hearing, Vernonia High School

\*Behavioral Objectives: Elementary School Social Studies, Mont W. Smith, Monroe Elementary School

Behavioral Objectives in Mini-Course of the English Department, Dian Smith, Priscilla Gaedecke, Tom Roe, Athol Sayre, Riddle High School

Objectives Stated In Behavioral Terms, Dolores T. Grabner, Dayton High School

Rational and Behavioral Objectives for a Sequentialized Math Program for Grades One Through Nine, Dante L. Daltoso, Riverside Junior-Senior High School, Boardman

Science in the Small High School Curriculum, Maurice E. Thorne, Crane Union High School and Lawrence Wolfgram, Dayville Schools

Strategies for Poetry, Lynda Kay Belcher, Days Creek High School  
Use of Behavioral Objectives As Adapted to a Unit on Sixth Grade Mathematics, John J. Barry, Days Creek Elementary School

INDIVIDUALIZED INSTRUCTION, LEARNING PACKAGES, CONTRACT TEACHING

An Individualized Library--Media Usage Skills Program, Evelyn M. Mann, Riddle Elementary School

Building a Skills File To Be Used in Contract Teaching in Our School, Mary Graven and Velma Weir, Richland Elementary School

Contract Learning, Gerald K. Gibson, Santiam High School

Contract Teaching, Morse D. Smith, Griswold High School, Helix  
Development of an Individualized Reading Program for Grade 1, Joyce M. Reinke, Detroit Elementary School

Further Implementation of Personalized Reading Instructions, Grace Stinchfield, Condon Elementary School

\* See Part 3 of this report

Implementing An IPI Approach At The Sixth-Grade Level,  
Danny D. Loomis, Alsea Elementary School

Implementing Individualized Reading Into Our Classroom,  
Elnora Baker and Emma Stevens, Helix Elementary School

Individual Learning Package: Man-Made Knit Materials, Sally Jean Wright, Amity High School

Individualized Instruction: A Student Prepared Library Procedures Handbook for a Small School, Caroline Sayre, Days Creek School

Individualized Instruction and Project Update, James Kohl, Clarence Lamping, Jo Crosby, Carole Findlay, David Haggerty, and Dave Curran, Monroe Union High School

Individualizing Instruction in Vocational Education, Roberta S. Jenkins, Riverside High School, Boardman

Individualized Math Study, Darrel Jones, Bill Warwick and Jack Slagle, Chapman Elementary School, Sheridan

Individualized Reading, Elizabeth Baltzell, Dayton Elementary School

Individualized Reading, Grace Leith, Chapman Elementary School, Sheridan, and Margaret Melonuk, Falconer Elementary School, Sheridan

Individualized Reading, Billie W. Pollard, Ironside Elementary School, Unity

Individualized Reading for Special Education Children,  
Jennie Blunck, Gaston Elementary School

Individualized Reading in My First-Grade Program, Opal P. Lovejoy, Cascade Locks Elementary School

Individualizing Reading Through Team Teaching, Judy Sanders, Halfway Elementary School, and Noble Morinaka, Pine Eagle School District, Halfway

Learning Package for Art, Mae Etta Kennel, Western Mennonite High School, Salem

Learning Package: Clothing Construction, Carole May Jones, Sheridan High School

Learning Package: Construction of a Pair of Men's Pants,  
Sandra Hann, Cascade Locks High School

Learning Package: Know the Kitchen (Handbook and Guide for Student Aides in the Kitchen), Florence A. Gross, Dayton High School

Learning Package: Paying by Check, Kathleen Donna Stiller, Jefferson High School

Learning Package Math: Addition of Fractions, Cloise M. Larrance, Culver Elementary School

Learning Package: Planning a Wedding, Nancy E. Weber, Valsetz High School

Mathematics Plan, Grades Seven to Twelve, Chuck Gourley, Mapleton High School

Package Learning, Lois Killinger, Jefferson High School

Plan for Initiating Individualization of Instruction,  
Mary Bray, Alsea Elementary School

Plan for Learning Packages in Social Studies and Science,  
Lucille K. Woods, Alsea Elementary School  
Planning Individualized Instruction for Harrisburg High  
School Through Behavioral Objectives, Mel Larkin, Gary Scott,  
Merlin Dewayne Crabb, and Richard Peterson, Harrisburg Union  
High School  
Planning a Relevant Individualized Course in English,  
Christina Brown and Lucy M. Susee, Harrisburg Union High  
School  
Projected Program of Reading Instruction, Patricia Scott,  
Chapman Elementary School, Sheridan  
Value of Learning Packages for Small Schools, Robert J. Stocking,  
Sherman County High School

#### NEW DESIGNS FOR SCHOOLS

A New Design for Inservice Programs for Small Schools in  
Marion County, Marvin L. Covey, Marion County IED  
Marcola's New Design for Educational Growth, Phyllis Bethune,  
John Schaub, and Ron Jeffries, Marcola Elementary School  
New Design for McKenzie Language Arts Department, Patricia A.  
Calaway, Molly Hill, Frieda M. Steele, Eldon Blanford,  
Walter Arima, Wade Thomas, Linda Whiat, Gary Hankins,  
Forrest Scarpelli, Susan Trelstad, McKenzie River Schools

#### TEACHER SELECTION AND EVALUATION

A Description of How a Teacher Selection and Evaluation Program  
Can Be Implemented in the Helix Schools, Evan L. Ellis,  
Griswold High School, Helix  
Evaluation Instruments: A Study of the Reliability, Objectivity,  
and Validity of Local Instruments, George Fenton, Jr., and  
Joyce Fenton, Pine Eagle School District, Halfway  
Evaluation of Teaching Services, Chester A. Boyle, Condon High  
School  
Proposed Plan for the Planning and Implementation of a Teacher  
Evaluation System and a Professional and Educational Improve-  
ment System, Jim Carlson, Union High School  
Role of the Department Chairman in Teacher Evaluation and  
Selection, Leah C. Smith, South Salem High School  
Teacher Evaluation and Selection, Glen A. Roth, Western Mennonite  
School, Salem  
Teacher Evaluation at Sheridan High School, David E. Sears,  
Sheridan High School

### THE COMMUNITY AS A CLASSROOM

\*How I Will Implement the Strategy "The Community as a Classroom,"  
John Haller, Mohawk High School, Marcola  
The Community as a Classroom, Dale Kurtz, Days Creek High School  
\*The Community as a Classroom, Marcia Skinner, Lowell High School  
The Community as a Classroom, Mattie L. Wells and Mary Jane  
McKinnon, Culver High School

### THE SELF CONCEPT

An Examination of Teacher-Student Interaction as Affected by Instruction on Improving the Self Concept, Ben J. Jones,  
Santiam High School  
Developing Student Self Concept, Willard P. Kennel, Western  
Mennonite High School, Salem  
The Importance of the Self Concept, Margaret Smits, Dayton  
Elementary School

### MISCELLANEOUS

A Contemporary Curriculum for the Teaching of Foreign Language in Small High Schools, John W. Blaser, Tillamook High School  
A Design for Beginning Band, William C. Hickerson, Arlington  
Elementary School  
\*An Introduction to Basic Data Processing, Bernice Y. Payne,  
Dayton High School  
Application of Institute Ideas to First-Grade Language Arts,  
Carolyn Irving, Dayton Elementary School  
Behavioral Change in Vocational Program Planning: An Administrative Project for Wasco County IED, Paul Hendrix,  
Wasco County IED  
Continuous Progress Curriculum at Gervais Union High School,  
Charles R. Thomson, Gervais Union High School  
Continuous Progress Program for Lincoln School, Vernonia,  
Velva Christensen, Virginia Johns, and Jim Johns, Vernonia  
Elementary Schools  
Developing Recreational and Avocational Activities Through Industrial Arts, James H. McMurtry, Valsetz High School  
Implementation of "Futures" Unit in Industrial Arts, Harold L.  
Locke, Mohawk High School, Marcola  
\*Implementation of the GATB, Rev. Arthur P. Dernback, St. Mary's  
High School, Medford

\* See Part 3 of this report.

Implementation of a Work Experience Program at Cascade Locks High School, Rogers C. Wheatley, Cascade Locks High School

Mini-Course Concept for Career Choice in Small Schools, Arnim V. Freeman, Gilliam County IED

\*Newer Media in Art Education, Lorraine DeRosso, Union High School

Office Practice Objectives, Linda Larson, Mohawk High School, Marcola

Outline of a Humanities Course, Alva Ray Blaylock, Jr., Elgin High School

Plan for Using GATB Tests in Ukiah High School, Charles J. Hitz, Ukiah High School

Proposal for Implementing a Lab-Oriented Approach and Computer System in Mathematics for the Pine Eagle School District, Chuck Peterson, Pine Eagle High School, Halfway

Proposal for a Review of Stated Instructional Objectives in the Curriculum of Elgin Schools, Sid Ratzlaff, Elgin High School

Responsible Citizenship Through Action Programs, Sam Gordon, Rod Harden, Paul Reiman, Kenneth C. Sprute, Warrenton School District

Review of Due Process in Dayton Public Schools, Bill D. Buffum, Bob J. Collins, and Earl S. McKinney, Dayton High School

\*Starting a Media Center in a Small High School, Robert W. Murphy, Culver High School

Strategy for Disciplining Students, Merritt Borden, Lowell Elementary School

Students and the Hardware of the Media Center, Shirley W. Newberry, Siletz School District

Teaching the Fundamentals of Music in the Fourth-Grade Classroom Through Implementing the C-Soprano Recorder and Certain Additional Rhythm Instruments, Dennis A. Faletti, Riverside High School, Boardman

Two-Hour Block Schedule for Business Vocations, Kathleen Boeckstiegel, Detroit High School, and Judith Parent, Santiam High School

Unit: Consumer Buying, Leota Thurline Holland, Siletz High School

Unit: Defining the Role of the Teacher, Wayne Kee, Colton High School

Unit in Geometric Figures and Formulas, Roy M. Mogster, Jr., Jefferson High School

Unit: Nervous System, Grades Three/Four, Ellen Hansen, Arlington Elementary School

Using the Taba Approach in the Classroom, David P. Bird, Richland Elementary School

\* See Part 3 of this report

Institute Participants

Arima, Walter S.	McKenzie River High School
Baker, Elnora	Helix Elementary School
Bare, Clarence	Condon Elementary School
Barry, John	Days Creek Elementary School
Baltzell, Elizabeth	Dayton Elementary School
Barth, Mary Jo	Valsetz Elementary School
Belcher, Lynda	Days Creek High School
Bethune, Phyllis	Marccia Grade School
Bird, David	Richland Elementary School
Blanford, Eldon	McKenzie River High School
Blaser, John W.	Tillamook High School
Blaylock, Ray	Elgin High School
Blunck, Jennie	Gaston Elementary School
Boeckstiegel, Kathleen	Detroit High School
Borden, Merritt	Lowell Elementary School
Boring, Milton	Fossil Elementary School
Boyle, Chester	Condon High School
Brandon, Dennis	Ione Elem. & High School
Bray, Mary	Alsea Elementary School
Brown, Carolyn	Siletz High School
Brown, Christina	Harrisburg High School
Buffum, Bill	Dayton High School
Calaway, Patricia	McKenzie River High School
Campbell, John	Payette Public Schools, Idaho
Carlson, Jim	Union High School
Christensen, Velva	Lincoln Elem. School, Vernonia
Clark, Dorothy	McKenzie River High School
Coe, Lee Ellen	Elgin High School
Collins, Bob	Dayton High School
Coon, Vera	Corbett Grade School
Covey, Marvin L.	Marion County IED
Crabb, Merlin	Harrisburg High School
Crosby, Jo	Monroe Union High School
Curran, Dave	Monroe Union High School
Dale, James	Valsetz Elementary School
Daltoso, Dan	Riverside Jr. - Sr. High School
Dernbach, Father Arthur	St. Mary's High School, Medford
DeRosso, Loraine	Union High School
Dummer, Francis	Dayton Public Schools
Ellis, Evan	Griswold High School
Estes, Joe	Stella Mayfield Elem., Elgin
Faletti, Dennis	Riverside High School
Fenton, George	Pine Eagle High School
Fenton, Joyce	Pine Eagle School District
Findlay, Carole	Monroe Union High School
Fraser, Bertha	Siletz-Eddyville Schools
Freeman, Arnim	Arlington & Condon Schools

Freirich, Bob  
Gaedecke, Priscilla  
Gibson, Gerald  
Glover, Albert  
Gordon, Earl  
Gourley, Chuck  
Grabner, Dolores  
Graven, Mary  
Gross, Florence  
Haggerty, David  
Haller, John  
Hankins, Gary  
Hann, Sandra Mae  
Hansen, Ellen  
Hansen, Grace  
Hardin, Rod  
Hartley, Harry  
Hearing, Alvilda  
Hendrix, Paul  
Hickerson, W.C.  
Hill, Molly  
Hill, Richard  
Hitz, Charles  
Holland, Leota  
Hughes, Martha  
Irving, Carolyn  
Isom, Sondra  
Iverson, Donal  
Jeffries, Ron  
Jenkins, Roberta  
Johns, Ginger  
Johns, James  
Jones, Ben  
Jones, Carol  
Jones, Carole  
Jones, Darrell  
Kee, Wayne  
Kennel, Mae Etta  
Kennel, Willard  
Killinger, Lois  
Kohl, James  
Kurtz, Dale  
Lamping, Clarence  
Larkin, James "Mel"  
Larrance, Cloise  
Larson, Linda  
Leith, Grace  
Locke, Harold  
Loomis, Danny  
Lovejoy, Opal  
Lost River High School  
Riddle High School  
Santiam High School  
Mill City School District  
Warrenton High School  
Mapleton High School  
Dayton High School  
Richland Elementary School  
Dayton High School  
Monroe Union High School  
Mohawk High School, Marcola  
McKenzie River High School  
Cascade Locks High School  
Arlington Elementary School  
Cascade Locks High School  
Warrenton High School  
Condon Elementary School  
Vernonia High School  
Wasco County IED  
Arlington Elementary School  
McKenzie River High School  
Alsea High School  
Ukiah High School  
Siletz High School  
Jefferson High School  
Dayton Elementary School  
Oregon Board of Education  
Mohawk High School, Marcola  
Marcola Elementary School  
Riverside High School  
Lincoln Elem. School, Vernonia  
Washington Elem. School, Vernonia  
Santiam High School  
Valsetz Elementary School  
Sheridan High School  
Chapman Elem. School, Sheridan  
Colton High School  
Western Mennonite High School  
Western Mennonite High School  
Jefferson High School  
Monroe Union High School  
Days Creek High School  
Monroe Union High School  
Harrisburg Union High School  
Culver Elementary School  
Mohawk High School, Marcola  
Chapman Elem. School, Sheridan  
Mohawk High School, Marcola  
Alsea Elementary School  
Cascade Locks Elem. School

Luna, Alex  
Mann, Evelyn  
Marsh, Lorna  
Marshall, Warren  
Martin, Georgia  
McKinney, Earl  
McKinnon, Jane  
McMurtry, James  
Medlin, Dorothy  
Melonuk, Margaret  
Miller, Irving  
Mogster, Roy  
Morinaka, Noble  
Murphy, Robert  
Murray, Otis  
Nash, Thomas  
Nelson, Terry  
Newberry, Shirley  
Newman, Harold  
Parent, Judith  
Payne, Bernice  
Peterson, Chuck  
Peterson, Richard  
Pollard, Billie  
Poole, Lawrence  
Putman, James  
Ratzlaff, Sid  
Regan, Edwena  
Reimann, Paul  
Reinke, Joyce  
Rilling, Lyle  
Roe, Tom  
Roth, Glen  
Rothwell, Michael  
Sampson, Bill  
Sanders, Judith  
Savage, Robert  
Sayre, Athol  
Sayre, Caroline  
Scarpelli, Forrest  
Schaub, John  
Scott, Gary W.  
Scott, Patricia  
Sears, David  
Sharp, Leora  
Shenk, Russell  
Skinner, Marcia  
Slagle, Jack  
Smith, Dian  
Smith, Ervin  
MacLaren School for Boys  
Riddle Elementary School  
Crolane Junior High  
Crow High School  
Condon High School  
Dayton High School  
Culver High School  
Valsetz High School  
Brothers Elementary School  
Falconer Elem. School, Sheridan  
J. F. Kennedy High School, Mt. Angel  
Jefferson High School  
Pine Eagle School District  
Culver School District  
Bandon Public Schools  
Cascade Locks School  
Valsetz High School  
Siletz School  
Westside Elem. Sch., Payette, Idaho  
Santiam High School  
Dayton High School  
Pine Eagle High School  
Harrisburg Union High School  
Ironside Elementary, Unity  
Detroit High School  
Colton High School  
Elgin High School  
McKenzie River High School  
Warrenton School District  
Detroit Elementary School  
Jefferson High School  
Riddle High School  
Western Mennonite High School  
Condon Elementary School  
Southern Oregon College  
Halfway Elementary School  
Burnt River High School  
Riddle High School  
Days Creek School  
McKenzie River Elem. School  
Marcola Elementary School  
Harrisburg Union High School  
Chapman Elem. School, Sheridan  
Sheridan High School  
Pine Eagle High School  
Valsetz Elementary School  
Lowell High School  
Chapman Elem. School, Sheridan  
Riddle High School  
Jefferson High School

Smith, Leah	South Salem High School
Smith, Mont	Monroe Elementary School
Smith, Morse	Griswold High School, Helix
Smits, Margaret	Dayton Elementary School
Sprute, Kenneth	Warrenton School District
Steele, Frieda	McKenzie River Elem. School
Stevens, Emma	Helix Elementary School
Stiller, Kathleen	Jefferson High School
Stinchfield, Grace	Condon Elementary School
Stocking, Robert	Sherman County High School
Stoner, Mary Louise	Warrenton Grade School
Susee, Lucy	Harrisburg Union High School
Swafford, Anna Mary	Joseph High School
Thew, Bill	Crane High School
Thomas, Wade	McKenzie River High School
Thompson, Gene	Valsetz High School
Thomson, Charles	Gervais Union High School
Thorne, Maurice	Crane Union High School
Trelstad, Susan	McKenzie River High School
Warnock, Ferman	Condon School District
Warwick, William	Sheridan Schools
Weber, Nancy	Valsetz High School
Weir, Velma	Richland Elementary School
Welch, Lewis	Umatilla High School
Wells, Mattie	Culver High School
Wheatley, Rogers	Cascade Locks High School
Whiat, Linda	McKenzie River High School
Whittemore, Thordis	Stella Mayfield Elem. School
Wolfgram, Lawrence	Dayville School
Woods, Lucille	Alsea Elementary School
Wright, Sally	Dayton Grade School
York, Paul	Warrenton Elementary School

Institute Evaluation Summary

179 Registered, 120 Evaluations Returned

1. I am 22 an Administrator; 38 an Elementary Teacher; 2 Other; 61 a Secondary Teacher; 5 Art; 10 Business; 5 Guidance; 5 Home Ec.; 18 Lang. Arts/Social Studies; 5 Librarian; 9 Math/Science; 2 Music; 6 PE/Health; 6 Vocational; 2 Special Ed./EMR
2. To what degree was preconference information adequate? 50 Superior; 64 Adequate; 3 Needs Improvement; 3 No Comment.
3. Please note the value to you of the various parts of the workshop. Check the appropriate rating column for each part of the program.

	<u>Much</u>	<u>Some</u>	<u>Little</u>	<u>None</u>
Keynote Session	<u>95</u>	<u>19</u>	<u>1</u>	<u>1</u>
Major Presentations (Elementary)	<u>28</u>	<u>16</u>	<u>1</u>	<u>1</u>
Major Presentations (Secondary)	<u>39</u>	<u>29</u>	<u>3</u>	<u>1</u>
Administrators' Sessions	<u>21</u>	<u>8</u>		<u>2</u>
Mini-Courses (Subject-Centered)				
Computer	<u>6</u>	<u>6</u>		
Environment	<u>2</u>	<u>1</u>		
Lang. Arts/Social Studies	<u>8</u>	<u>5</u>	<u>3</u>	
Behavioral Objectives	<u>1</u>	<u>3</u>		<u>2</u>
Art	<u>6</u>	<u>3</u>	<u>1</u>	
Reading	<u>1</u>	<u>1</u>		
Musical Instruments	<u>3</u>			
Music: Manhattanville	<u>3</u>			
Music: Selection	<u>3</u>			
Contract Teaching--PE	<u>4</u>	<u>1</u>	<u>1</u>	
Manzanita	<u>5</u>			
Reading Instruction	<u>4</u>	<u>1</u>		
Due Process	<u>3</u>	<u>1</u>		
Business: 2 Hour Block	<u>7</u>	<u>2</u>		
Merritt Davis School		<u>4</u>	<u>2</u>	<u>1</u>
Office Simulation	<u>5</u>	<u>3</u>		
GATB Training	<u>3</u>	<u>1</u>	<u>2</u>	<u>1</u>
Math Sections	<u>5</u>	<u>1</u>	<u>1</u>	
Vocational		<u>2</u>	<u>1</u>	<u>1</u>
Library AV	<u>1</u>			
Questioning	<u>1</u>			
Bush House	<u>1</u>			
Media Sessions	<u>22</u>	<u>25</u>	<u>13</u>	<u>2</u>

## 3. Continued

	<u>Much</u>	<u>Some</u>	<u>Little</u>	<u>None</u>
Legislative Interpretation	36	20	1	
Opportunity to share ideas	62	27	8	
Social Arrangements	58	21	5	
4. To what extent has the workshop increased your awareness and receptivity to new and better ideas in education?				
<u>73</u> Much; <u>40</u> Some; <u>3</u> Little; <u>      </u> None;				
<u>5</u> No rating				
5. As a result of attending the workshop, will you feel more confident to develop objectives and design programs to meet the special needs of your school district?	<u>65</u>			
<u>45</u> Some; <u>6</u> Little; <u>1</u> None; <u>4</u> No Rating				
6. Do you feel you received resources and information necessary to carry out new techniques and programs?	<u>67</u>			
<u>44</u> Some; <u>6</u> Little; <u>1</u> None; <u>3</u> No Rating				
7. List the workshop activities in priority order on which you would like to have regional and/or statewide follow-up sessions:				

Doctor Ellsworth - 30	Instruments in classroom - 1
Behavioral Objectives - 9	Community as a Classroom - 5
Developing Mini-Courses - 3	Learning Packages - 6
Vocational English - 2	Outdoor Education - 1
AV/Media in the Classroom - 6	Manzanita Project - 13
Questioning - 10	Manhattanville - 2
Due Process - 32	Contract Teaching - 8
Individually Prescribed Instruction - 11	Computers - 6
Lab Approach to Math - 3	Legislation - 6
Futures - 2	Vocational Education - 2
Reading Instruction - 17	Effective Discipline - 3
Doctor Manatt - 9	Art - 1
Doctor Bolton - 12	English - 1
Mrs. Grieve - 1	Idea Sharing - 2
Scheduling - 1	Testing - 1
Indiv. Approach to Math - 1	Enhancing Change - 1
Environment - 1	Woodburn Plan - 2
Poetry - 1	Devel. Min. Standards for Clusters - 1
New Programs throughout the state - 1	Grammar Instruction - 1
Making Lang. Arts Curr. - 1	Curriculum areas - 1
Elem. Due Process - 1	Elem. Science & Art - 1
Business Innovation - 1	Elementary Sessions (all) - 1
	School/CR Organization - 1
	Social Sciences - 1

8. How do you rate the summer institute, in general?

78 Outstanding; 38 Good; 1 Mediocre;        Poor;  
3 No Rating

---

136

144